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Established 1914

A Weekly Business Paper for Those Who Make, Sell, or Buy Chemicals, Dyestuffs, Drugs, Essential and Fatty Oils

VOLUME XIII, NEW YORK, JULY 11, 1923 No. 2

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In This Issue

Essays of Prize Winners in Salesmanship Contest

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Retraction of Publication

Concerning Herman A. Metz, a witness for the Government in the suit of the U. S. Government against the Chemical Foundation, Inc.

The following was printed in the Wilmington Morning News in its issue of June 27th, 1923

Colonel Herman A. Metz Paid No Spy in Senate Probe

In the issue of the Wilmington Morning News of June 26, 1923, it was stated that Colonel H. A. Metz, of New York, while testifying in United States District Court, Monday, as a witness for the Government in the suit of the United States against the Chemical Foundation, Inc., admitted that he paid money to a German spy for services in connection with a certain Senate investigation.

The News further stated that Colonel Metz used affidavits to discredit the War Department in a Congressional Committee hearing relating to dyes.

The News further stated that testimony was heard to show that one Edward W. Dieters was a German spy in the employ of German chemical interest; that he had been indicted here; that he had fled the country, and that he had been employed by Colonel Metz to gather information and affidavits used by the United States Senator, George H. Moses, of New Hampshire, in connection with the Senate investigations of the dye interests of this country.

The foregoing statements were false in every particular and were neither reproductions of the testimony nor fair paraphrases thereof.

The testimony as above printed in the News was not given at the trial.

Colonel Metz did not admit that he paid any person shown by the testimony to be a German spy any sum of money whatever. There was no testimony or other evidence to this effect given.

Colonel Metz neither testified nor did anyone else, that he used affidavits to discredit the War Department. On the contrary, Colonel Metz specifically denied that he had employed Edward W. Dieters to render any services to him or to any other person.

It was not testified that Cyril Bennett was a German spy and it was not charged by the defense that he was.

It was not testified to or charged that Edward W. Dieters was a German spy.

It was neither testified to nor charged that Edward W. Dieters was employed by German chemical interests, nor that he was indicted nor that he fled the country.

It was not testified to or charged that Senator George H. Moses, of New Hampshire, used any affidavits or information prepared by or obtained from Edward W. Dieters, in the Senate or elsewhere, to discredit the War Department or for any other purpose.

Our representative was not in court during the trial. In assembling the information received by our representative from persons present, the impression was gained by him that the testimony as printed in the News had been given. The News had no desire to misrepresent the facts and is glad to make this correction in justice to all concerned.

THE MORNING NEWS,
By CHARLES E. GRAY, Managing Editor.

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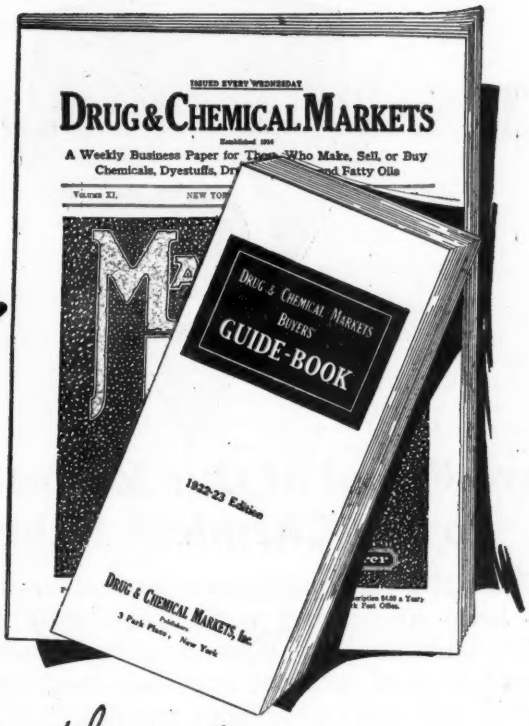
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DRUG & CHEMICAL MARKETS
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Chemicals, Dyestuffs, Dr
nd Fatty Oils
DRUG & CHEMICAL MARKETS BUYERS' GUIDE-BOOK
1922-23 Edition
DRUG & CHEMICAL MARKETS, Inc.
3 Park Place, New York

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How's the market—
What's the news—?

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DRUG & CHEMICAL MARKETS

3 PARK PLACE, NEW YORK

VOLUME XIII, NUMBER 2 [JULY 11, 1923

THE EXPOSITION AND FOREIGN PRODUCTS

At a recent meeting of exhibitors of the Chemical Exposition in New York, those present voted to exclude products of foreign countries from the 1923 Exposition, as has been done for the past eight years. Although numerous requests dating back to 1915, have been made for space at the Exposition each year by importers, the management has repeatedly turned them down. One request a year or so ago for the inclusion of foreign goods came from a United States Government agency, but this met a similar fate. The Exposition has been a strictly national affair for eight years, and it is evidently the intention of the exhibitors to keep it as such in the future.

During the past eight years, through war-time and reconstruction, Europe must have produced its share of scientific and industrial improvements in chemicals, equipment, and instruments. There is really no good reason why the American users of these products should not have the privilege of seeing them along with the American made goods. To exclude them from the Exposition because they represent potential competition for the American chemical, dye, and equipment industries is childish. In past years, numerous visitors have asked why foreign goods, competitive and non-competitive alike, were missing. Technical men have even accused the management of retarding the development of the American industries by their refusal to permit foreign goods to be shown.

Prejudice against German goods is not the only thing to be considered. Products from England, France, Holland, and Japan would have been shown in former years had the advisory committee or the management of the Show permitted. As far as German products are concerned, the majority of foreign exhibits at the Exposition, were such allowed, would undoubtedly be from this source, but the fact must also be considered that it is well nigh five years since the war ended.

To the credit of the Exposition managers, it must be said that they have always steadfastly supported the American chemical and equipment industries to the exclusion of all others. DRUG & CHEMICAL MARKETS has also fought hard for the furtherance of American chemical interests, particularly in the matter of tariff and other laws. The question of foreign exhibits at the Show, however, presents another angle. No question of jeopardy to the American industry enters the argument. As far as we can see, it becomes a matter of giving the visitor at the Exposition a complete view of all chemical industrial developments. Even though the foreign exhibitor sells a visitor at the Show, the American industry still has the tariff and 3,000 miles of water to equalize competition. The American industry is no longer a sickly "infant." It does not have to be guarded from every semi-competitive zephyr which blows. The Exposition should be a place for the free intercourse of scientific and industrial ideas. To restrict foreign exhibits appears narrow and small. To permit them looks like the American thing to do.

THE MOST EFFECTIVE SALESMAN

To get a buyer's business is one thing. To keep it is another.

The fact that a high-pressure salesman has extracted an order from a new account is neither evidence of quality of the product sold nor of real salesmanship. To have this order repeated a dozen times, however, is quite conclusive evidence that the product must satisfy, and that the salesman at least has not offended by his selling methods. Frequent orders for a certain product from the same source may mean good selling, and then again, they may come through in spite of mediocre salesmanship. Too many salesmen take to themselves the credit for increasing the sales of a product when the merit of the product is ninety-nine per cent responsible. On the other hand, many a salesmanager has condemned a salesman for failing to bring in orders when the goods in question could not be sold by the best salesman living.

This brings up the question of what is the most effective type of salesmanship. Is the high-speed, high-pressure salesman who swarms all over the buyer, emerges triumphant with a wilted collar but with the order as well, the most effective type? Decidedly, in the chemical business, he is not. If he were selling a one-time one-order-only proposition, he might be effective, but it is quite safe to say that this character would never get by the office boy on future visits. This type sells oil stock to widows, but not chemicals to business men. The plodder, the plugger, the routine order taker, devoid of any get-up-and-go, is also far from the most desirable, although all in all he is to be preferred to the so-called "live wires," who are so much alive that they are offensive.

The ideal salesman for the chemical industry lies midway between. He is neither a cyclone nor a calm; a magpie nor a mummy; he is not too aggressive nor too retiring. He is a moderate gentleman who knows his goods and his customers' needs, and

who, after hundreds of visits on bored purchasing agents, still "wears well." Of course, salesmanship, good, bad, or indifferent, cannot repeatedly surmount the barrier of inferior products. Given even quality, price, and service by his house, the "moderate" type salesman is undoubtedly the most effective over a period of years. The aggressive, "live-wire" type may get the business, but the moderate type can usually go one step further, and keep it.

THE ALCHEMIST AGAIN

Striking evidence of the persistency of the belief in Alchemy has recently come to one of the big chemical companies in the following curious communication:

> "Would you be so kind to let me know by return mail if I cauld obtan chemical Pure Carbon as I would like to make an experiant on a instruction I got last Spring in a Drem. I Dramt I was praying to God because I was not satisfied in my Posision so far maney and Income was and I heard one say Why you dont make diman, I answered how could I make Diman and it was told me how I should prasid in full ditals, but I have not as yet don anything so fare in experiment because I mast have Pure Carbon to start with, so if you have any Carbon nex to Diman ether Pure grafid are Silverin Carban let me know and I would be oblige to you far same."

It is perfectly natural that the processes of industrial chemistry being based on chemical changes should be more or less mysterious to the public. They have even a strange fascination for the hard headed business man and banker who too frequently hope, sometimes without proper warrant, that a chemical enterprise will mean exorbitant profits because the chemist can take a quantity of cheap raw materials; mix them up; wave a chemical wand over them and secure extremely valuable products for which there is a great market. Figs from thistles are as nothing compared to gold out of seawater and gasoline out of seasand.

Sometimes it even seems that those who are actually engaged in the manufacture of chemicals forget that, while their plant processes are based on chemical changes, nevertheless their costs, their selling price, and the difference between the two which is net profit are governed by the same economical laws of supply and demand, of diminishing returns which rule in the markets for all goods from a bushel of wheat to a diamond brooch.

USES OF CHEMICAL PRODUCTS

The chemical needs of the consuming industries is a fascinating study, not only for the manufacturer but for the layman interested in knowing how the products he may use from day to day are made. A call from Singapore for acetic acid might mystify a salesman not familiar with the rubber trade of the Far East where the acid is used to coagulate the latex for shipment to the United States. Anhydrous ammonia is also in demand for use in the same process. When the latex reaches this country the interest in it spreads from the rubber industry to paper making for which it is also useful.

In home industries it is natural to think of dyes for the textile trade and vegetable oils for soap making, but few people realize the extent to which chemicals are used in steel manufacture. The metallurgist must have his laboratory stocked with materials for making tests in every step of the process. It is estimated that 15 per cent of the sulfuric acid produced in the United States is consumed in the steel industry. Many chemicals are used in smelting. Calcium carbonate, sodium chloride, sodium silicate, soda ash, calcium carbide, borax, barium chloride, barium carbonate, and copper sulfate are all necessary, and form no small part of the materials that make rolling, forging and casting possible. A review of the purposes for which these chemicals are used appears in the news columns of DRUG & CHEMICAL MARKETS and the information supplied by William A. Forbes makes interesting reading. His statement regarding the large amount of sulfuric acid necessary for "pickling" draws attention to the universal use of this acid in American industries, and the value of statistics bearing upon the production and consumption of such basic commodities.

Passing to other industries, the tanner needs divi divi, cod oil, and acids; the paper manufacturer must have clays, alkalis and alums; the glass maker needs soda ash and salt cake; and the textile manufacturer a surprising number of heavy chemicals and oils, starches, dextrines and gums, in addition to the indispensable colors that lend charm and gaiety to his ribbons and silks. The field seems almost unlimited in which chemical information is necessary, covering sources of supply, available stocks, prices and statistics, gathered by the trade papers and placed before the manufacturer for the efficient development of his business.

Many Men: Many Minds

A mill had for years been experiencing difficulty in the matter of dyes; the kind that were sometimes delivered were not of the proper sort; sometimes shipments were tardy; always there was trouble, and the men at the head found it necessary always to experiment until finally, through a timely advertisement, a new firm was found that could deliver the goods as desired, and promptly. Ever since the sponsors of that advertisement and the cotton mill's executives have been doing business together, with satisfaction. The executive who first saw the advertisement never skimps a trade paper, for he knows new and better things can be found only by looking for them.—Frank V. Faulhaber in "Fibre and Fabrics."

Down in Brazoria county, Texas, says the "Wall Street Journal," they get pure sulfur, oil, salt and gypsum out of one hole. Within a 100-foot radius there have been drilled a dry hole a small oil well which had to be pumped and one which gushed ten thousand barrels a day. Recently, however, this territory added a new freak of nature,—an oil well owned by the United Drilling Co. at West Columbia, which had been pumping 100 barrels a day for the past couple of years, suddenly turned, without warning or any work being done, into a gusher making 2,000 barrels a day.

Technical Training and Salesmanship

Prize Essays Submitted by Students in the Chemical Courses in New York and Philadelphia

FIRST PRIZE WINNER—C. F. WOLTERS,
Consumers Chemical Co., Philadelphia

SUPPOSE we take a perfectly plain new barrel and fill it with any one of our standard chemicals, say Chemical X A No. 1. Now then, take a similar barrel and put into it the same chemical. We will give this latter barrel a special mark to distinguish it from its fellow. By way of example, suppore we mark this barrel "John Doe's Chemical X". We then have two barrels, one "Chemical X A No. 1," the other "John Doe's Chemical X."

Now we want two salesmen. For the sake of our story "just suppose" we have two good salesmen, Tom and Bill, exactly alike, with the single exception that Bill has a real curiosity regarding these chemicals he is going to sell, while Tom more or less takes it for granted that he will sell them all right. Bill's curiosity might be rightly classed a thirst for knowledge regarding the chemical field in general. So Bill starts to find out something about these chemicals. It just so happens that Bill is fortunate enough to have created for him, by a few foresighted enthusiasts, a course especially designed to give chemical knowledge to chemical salesmen. He appreciates the opportunity and takes the course, with a real desire and driving will power to get something out of it. He gets a mighty good foundation and with this insight into what is beyond he keeps at it after the course is over until—but that is getting too far into the future.

We now have Chemical X A No. 1 and John Doe's Chemical X—also two good salesmen, Tom, just a salesman and Bill, a salesman with a good basic knowledge of the fundamental chemical industries.

Now bring our chemicals and our salesmen together and see what happens.

Tom gets the dope on both Chemical X A No. 1 and John Doe's Chemical X. He understands that they are the same quality in the same package and should sell at the same price. He is impressed with the fact that John Doe's grade seems to be recognized as the standard and is sold in greater volume and at a slightly better price at times. This puzzles him a bit, but still he seems to have all the essentials, so out he goes and, being a good salesman, he starts bringing in the orders. That is his selling ability pure and simple, his biggest assets being a pleasing and forceful personality plus a good "gift of gab" and a knowledge of human nature and the world. He drives at it in a good wholehearted way and, true to form, he finds it easier to sell John Doe's grade than the A No. 1 grade of Chemical X. Of course he has his troubles and his lost sales with here and there a customer slipping away to a competitor. The trouble frequently seems to be located in some difficulty which the consumer has had in his own plant, in some way connected with the use of Chemical X. Anyhow, Chemical X is supposed to be the cause, if for no other reason than because the trouble started immediately after they started buying it from Tom. And Tom, not being able to present a good case to the contrary, loses a customer. Tom also finds it almost impossible to convert some of the old fashioned fellows who are still using the antiquated processes, requiring two extra operations, now eliminated by the use of Chemical X. They listen to his talk, ask a few technical questions which pass over Tom's head, and decide to let well enough alone and try Chemical X. In other words, Tom's efforts are of necessity confined to selling already established users of Chemical X which means he must steal customers away from competitors. Tom is, therefore, giving little more than a pleasing personality to the industry, his influence being in general toward lower price through his practice of stealing customers. Still, because he is a good salesman he sells.

Bill, on the other hand, has every advantage of salesmanship plus knowledge of chemistry which he is increasing every day. Bill, of course, has his troubles, but it is particularly noticeable that when he becomes involved in a case of complaint, his knowledge, not only of his own product, but also of its chemistry in relation to other products, helps him in innumerable cases to show the buyer that it is impossible chemically for his products to be the cause of the particular trouble under consideration. He holds customers where Tom, without the necessary knowledge, loses out. And in not a few instances Bill is fortunate in having the necessary insight backed by knowledge to locate the real trouble. Such cases seldom fail to cement relationships with the customers which can not be broken down by competitors.

Able to Show Manufacturers

Then too, Bill certainly can go to the users of the old process, talk in their own language, and show them the real possibilities of Chemical X in such a good sound chemical way that in a normal case he gets his trial and establishes a new customer, thereby increasing the actual consumption of Chemical X. Of more importance to him, personally, is the fact that these customers are personally grateful for a real service and will stick to Bill for years to come.

Bill is constantly impressed with the value of chemical knowledge for a chemical salesman and follows up his original course with a consistent effort to know more, for the more he gathers the more he appreciates the value and necessity of what he has as well as the enormous amount to be learned.

Bill, either consciously or unconsciously is putting into his job more than is required and more than is usually put in by less exceptional salesmen. Then along comes opportunity and knocks. A better job, a bigger field and greater responsibility require more than just ordinary knowledge and Bill is prepared, so opportunity has to knock but once.

As far as Tom goes—well he goes just as far as can be expected of an ordinarily good salesman. Bill is a better salesman and is cashing in dividends on the

basis of the extra knowledge he brings to bear on his job.

It is not quite a perfect parallel, but in some respects our two salesmen might be compared to our two original barrels, both alike and both with the same stuff in them. Then in the case of one barrel we add a brand name or trademark as we added knowledge to one salesman. Well, the knowledge we added represents the accumulation of the work of ages and makes that salesman stand out as having something more than usual behind him. The trade mark "John Doe" which we added to our Chemical X identifies that product as exclusively John Doe's Chemical X, a product with something more than usual behind it. Indeed, outside of the consideration of its mere chemical analysis, which may or may not be the same as many other Chemicals X, this particular John Doe's Chemical X has the accumulation of the years of work of John Doe's Chemical Company. Now John Doe's Chemical Co. may be internationally famous or just a small local concern, but just as long as John Doe's name stands for Honor, Reliability and especially Progress—just so long will John Doe's Chemical X represent greater value than just any old Chemical X.

Value of a Name

In the case of either our two salesmen or our two barrels it takes time and honest effort to create the difference which makes one stand out among the others of its kind. It was relatively easy to add John Doe's valuable name to Chemical X although it may have taken years to establish John Doe's name as worth adding. And in the case of knowledge added to our salesman, it took years to establish that knowledge, and unfortunately the Doctors have not yet discovered a method of adding knowledge overnight. The man himself must have the desire to learn, and he must be willing to make the persistent effort to go after the knowledge desired, and to make sacrifices in the present for the end in view in the future.

That chemistry is valuable in some degree to every chemical salesman would seem so evident as to be taken for granted. Indeed, our Chemical Salesmen's Association is so thoroughly convinced of this that it has made possible a special course for chemical salesmen, and without exception, the employers of chemical salesmen have whole-heartedly endorsed the movement.

To the Bills who take the course because they really want to get something out of it, a large future is certainly opened up.

To the Toms who do not take the course, and also to the Toms who follow the lines of least resistance and take the course only because someone else pays the way—well, for them there is opened up nothing new in the future.

We will always have Toms and we will always have Bills, and we hope the older Bills will always be providing opportunities for the younger ones from whom there will be enough Bills developed to make it entirely worth while.

Salesmen's Association of the American Chemical Industry, is rapidly completing plans for the third annual banquet on Thursday evening Sept. 20, during the week of the Chemical Exposition. Fred Signer, of Butterworth-Judson Corp., has been appointed chairman of the banquet committee. Additional information in regard to associate members of the committee as well as the exact time and place of the meeting will be given out at an early date.

SECOND PRIZE WINNER—A. J. MATHEY, Mathieson Alkali Works, New York

ARGUMENTS pro and con have been flying thick and fast during recent months anent the value of a knowledge of chemistry in the make-up of a salesman of chemicals. While it may be argued that a controversy of that kind should be settled by consideration of figures portraying the relative selling efficiency of the technical versus the non-technical man, the great diversity of extraneous factors that must, inevitably, enter into the compilation of such statistics renders them of but little value for that particular purpose. Aside from the foregoing objection to the seemingly rational and logical method of settling the ever recurring argument, it is a fact that up to the present time we have not had any satisfactory definition of "salesmanship."

The fact that the lexicographers (if we may base our conclusion upon the very latest and most complete dictionaries of the language) have not seen fit to amplify the definition given in the dictionaries of a half-century or more ago, may be taken to indicate that the true meaning of salesmanship and the true status of the salesman in the economic scheme of things are in the making, hence, subject to as liberal or as restricted an interpretation as will suit individual taste, having for foundation the palpably inadequate statement of long standing that a salesman "is one who sells goods in a shop or store, or by canvassing."

However, those among us who have any connection whatever with the merchandizing end of industry realize, and hasten to affirm, that there is a wide gulf that yawns between the mere "order taker" and the one whom we are pleased to call "a real salesman." In the case of the canvasser, or house-to-house salesman, it is presumed he merely introduced himself to whoever answered his summons at the door, and inquired: "Do you need any of Dr. Healem's salve?" If answered in the negative he, undoubtedly, apologized for the intrusion and went to seek a better prospective outlet for his wares.

However, enough of the early history of salesmanship. We are concerned, at this moment, with the query: "Does a chemical training assist in promoting the efficiency of a chemical salesman?" The answer of the writer is unqualifiedly affirmative. That there should be any serious argument as to the reasonableness of the foregoing assumption is inconceivable. It is, however, a fact that even a thorough knowledge of the thing he is purveying will not bring about the metamorphosis of an "order taker" into the higher life of the "salesman." Until the time comes that we change in its entirety our system of selling and distributing merchandise personality must, of course, remain the dominant force in salesmanship.

Regardless of our feeling in the matter of benefits to be derived by a chemical salesman from a drilling in the fundamentals of chemistry (at least that part which is immediately applicable to the particular chemicals he is selling), we must admit that this matter of personality predominates when we come to a consideration of the necessary qualities in a salesman.

However, granted the possession of personality of the pleasing and convincing sort, and granting, further,

that the salesmen whom we wish to compare are alike well equipped in the matter of personal appearance and physical and mental energy, it would be, patently, the veriest folly to say that the man who has at least a rudimentary knowledge of the derivation and the scope of possibilities of his particular line of chemicals is not better equipped to achieve success as a salesman than is the man who must struggle along with nothing but his natural endowments to summon to his aid.

Must Sell "Service" Nowadays

Today we sell not merely an article of merchandise but (and this is a greater thing and of vastly greater importance) we sell a "service." So closely has that service become intertwined with the merchandise we sell that the service itself has practically lost its separate identity, so much so, in fact, that in most instances neither the seller nor the buyer realizes that such a service is not a part of the merchandise sale itself. The service, be it great or little, is taken entirely as a matter of course by all parties concerned in the transaction of selling and buying.

The chemical knowledge possessed by the salesman does not add one cent to the intrinsic value of the product sold by him, yet that knowledge can, and often does, enable him to command a considerably higher price for his particular brand of chemical than is obtainable by the salesman for a competing brand of equal worth. The chemical knowledge does the trick!

The thing to be remembered is that, if at all possible, the manufacturer of today should follow his product into the hands of the purchaser and endeavor to so guide that purchaser's use of the product as to insure realization of the maximum possibilities inherent in the product as it is turned out of the manufacturer's plant. In the case of all finished products, i.e., food, clothing, household appliances, and all other articles coming within that category, the Service of Advice should extend to the ultimate consumer. However, in the event a manufacturer produces a so-called "raw material" which is used in other processes of manufacture—perhaps losing its identity in the process—the manufacturer's endeavor should be to keep the intermediate manufacturer currently advised of the best knowledge and practice relating to the use of the chemical products produced by his plant.

Power of Knowledge

Knowledge of the thing to be sold applies, with equal force, to the advertising man. The relationship existing between "advertising" and "selling" is so close that the line of demarcation, if any was ever recognized, has been entirely obliterated by recognition of the mutual needs of the two departments of the modern selling organization.

However, while the ability to render a "service of advice" to the buyer should be considered a prime requisite of the efficient chemical salesman, it is well to keep this advice within certain well defined limits, and it should never be couched in the terms of narrow pedantry. Such an attitude, if the buyer has any sense at all, cannot do other than to antagonize him and regardless of the helpful nature of the advice given him his opinion of the salesman and, ergo, of that salesman's line must inevitably fall many points below par.

On the whole, if a man is able to convince another man, within a few moments after he starts a conversation, that he "knows what he is talking about" he may be sure of a hearing at least, unless he have the bad fortune to address the veriest boor. But let a man once prove by uncertainty, by hesitancy, by evasive replies to straightforward questions, that he is not thoroughly familiar with a subject whereon he presumes to speak, the modern factory head, the value of whose every moment may be expressed in terms of dollars and cents, will give him scant attention and only a very brief audience, with his chances of a further hearing at some later date slightly less than Nil.

At the time Archimedes made his now historic promise to move the Earth with his little lever if someone would give him a vantage point at which he could apply pressure, he had already established for himself a reputation as a mathematician, hence his revolutionary pronouncement was received by his contemporaries and given credence, or lack of it, according to the state of receptiveness or non-receptiveness of the individual hearer, but the important point to be remembered is, he was listened to with respect. Had he been the Court jester or someone whose earlier identity had been merged with that of the great toute ensemble the "principle of the lever" might have received the welcome of a vaudeville joke, and while it might, conceivably, have "knocked 'em out of their seats" with mirth, it would have been soon forgotten by the general public, to be recalled only when a minstrel troupe made the rounds of the provinces. To paraphrase an old and widely quoted saying: "When knowledge means success, it's a darned fool who will remain in ignorance."

THIRD PRIZE WINNER—WILSON I. DOAN

Dow Chemical Co., New York

HUMAN nature is said to be very much the same the world over. One of the things we humans seem to dislike more than anything else is to say: "I do not know." At least a fair percentage of the purchasing agents would apply this attribute to the majority of salesmen.

There are technical questions that can be and often are asked of a chemical salesman which, generally speaking, are best answered by admitting a lack of information on the particular point in question. For that purpose, the most of our large chemical manufacturers have research departments. Some of these are rather in embryo form as yet but there is a distinct tendency in this direction. Indeed many of the smaller producing concerns and a few of the chemical distributing houses now maintain a research and advisory technical staff which is available for the assistance of their sales departments. Consequently the answer to any reasonable, technical inquiry concerning a chemical problem can usually be answered to the satisfaction of all concerned if the salesman will only place himself in a position of giving his customer the best service available on the part of his employer rather than to attempt to make the service a personal proposition by advising the customer on a technical subject concerning which he is possibly only partially familiar.

A certain amount of technical knowledge should be required as a prerequisite for the average chemical salesman. Just how much training is necessary will vary—to some extent with the individuality of each salesman but to a far greater degree with reference to the particular product or products which his company offers. A product may be used by one industry in a very simple reaction while the same material may be utilized by another in quite a complex process. Because

of this very fact many men have diverging views on this question of the extent of technical training best adapted for selling purposes. There could be a considerable difference in the amount of chemical training necessary for a successful salesman to negotiate a sale for export as compared with another consummating a contract for the same goods to be used in the manufacture of a chemically pure medicinal. Each, however, should have some technical knowledge of his subject.

It is usually conceded that an elementary course in Chemistry is the best and proper foundation upon which such a salesman should build his knowledge. This is not necessarily a universal rule, for some of our most successful salesmanagers have been developed in other ways, such as having served in the production departments and in that manner thoroughly familiarizing themselves with processes of manufacture of the finished products of their companies. However, the man who has had elementary chemistry is probably in somewhat better position to discuss chemicals and chemistry in general with his trade than one whose knowledge is confined to that which he has acquired in his own plant.

The Application of Dyes

During the past four years there has been a remarkable change in the character of dyestuff salesmen with reference to their training. At the close of the war it was almost the consensus of opinion that such men must have had several years of active practice in the application of dyes. This condition still continues to a considerable extent with distributing houses from whom almost any dye may be obtained. But the manufacturers and jobbers of special colors have apparently turned to such men as have a fair technical training in this direction and who feel themselves specially adapted for selling. Many chemical salesmen who had a general conception only of the technicalities of those chemical products which are dealt in daily have been called upon to carry on the sales of such color producers and they are making good in that field.

There may be specific cases where a salesman has too much technical training to his credit. His example would be the exception rather than the general rule. And yet, there are numerous, wide-awake, young men without scientific training who are selling chemicals and who can probably point to some one or more instances where the former has lost business which was gained by the latter. Possibly this may be on account of the fact that the technically trained man has spent so much time and effort in securing his knowledge he is not keen in realizing the psychological moment at which to close his technical discussion and produce his order book,—a moment for which the other has probably schooled himself because of his appreciation of his technical deficiencies.

Mention has previously been made of a general rule that an elementary course in chemistry is possibly one of the greatest prerequisites for the chemical salesman. But where this can be supplemented by direct association with plant production, either by actual employment in the works proper or at least by close contact over a year or more, the salesman secures that ground work which is so valuable to him in his active pursuit of the fleeting order. A man who has perspired hour after hour during long summer months around an electrolytic caustic soda cell is quite likely to be able to answer any reasonable technical question which will be put to him in the sale of his goods. We are now assuming that he has had the benefit of an elementary course and has in mind the fundamentals of the theories he was taught at that time. As Uncle Remus has reflected: "A boy who pokes a stick into a bee hive is securing information which will stay with him through life and should keep him out of trouble," so also the amateur salesman who has attempted to empty a tank of Ethyl Chloride in a warm room will be in position to give some advice on the best method of handling this commodity.

For such a man, who has the gift of commercial instinct, who has actually absorbed a year or more of college chemistry and retained at least the rudiments thereof, and who has also had some manufacturing experience, there is a wide field. Manufacturers and distributors of chemicals recognize his necessity to their organizations and are willing to pay his price in return for his brains and energy. He is as necessary to their ultimate success as their highest paid research chemist, who should be called upon to cooperate with this salesman in answering unusual and very technical problems.

Do not be afraid to say to the purchaser: "I don't know," but be sure you add: "however, I will find out for you,"—and then be sure to do so.

HONORABLE MENTION—FRED E. SIGNER,

Butterworth-Judson Corp. New York

SALESMANSHIP has been defined by some as an art, by others as a science. The test of salesmanship is accomplishment. It is therefore, questionable whether it is proper to recognize any definition as comprehensible to cover the entire field of effort. Salesmanship should be considered as of many forms depending upon the character of the product to be sold or the result to be accomplished. Some sales are made as a result of an appeal to curiosity, some to sympathy, some to vanity.

The salesman who is a touch and go man, that is, never expecting to sell the same person the second time generally follows entirely different methods than the salesman who expects to sell his customer regularly. Therefore, using these two types, we might put the first under definition of salesmanship as an art; and define the second, salesmanship as a science. The salesman of a recognized or standard product selling to consumers who are regular users where the quality of the product, the price and service are the main considerations, must pursue an entirely different method of approach. The salesman should have a general knowledge of the product he is offering for sale. If it be chemicals it is not necessary that he be a chemist, but he should have a general knowledge of chemical terms and chemistry as applied to his particular product.

A bridge player who has committed all of the rules of bridge to memory in following such rules plays a good game but very frequently a man who has only a passing knowledge of the rules of the game but knows cards, has card sense and uses his wits will frequently win against the man who knows all the rules and makes his main object the following of the rules rather than winning the game.

The first duty of a salesman is to accomplish results and above all else avoid argument or dictation, but in a pleasant way explain about the quality of the product he has to sell and what, if any, special advantages it offers. Too much knowledge of the intimate details of the products, unless challenged by the buyer,

may cause the salesman to present his case in a very technical way and create the impression that his visit was made to air his knowledge of the product rather than to sell it.

What Salesmen Have Learned

The chemical course of lectures given by Professor Breithut at the City College of New York, under the auspices of the Salesmen's Association of the American Chemical Industry must be of great benefit to every earnest salesman of chemicals, particularly to those who had no knowledge of chemistry, for the following reasons:

1. He found that chemistry is not a great mystery but an assemblage of elements that may be arranged and rearranged to suit the will of the chemist and produce varying results, just as a scholar may arrange and rearrange the words of the dictionary and produce prose, poetry, philosophy, or what not.

2. That the Benzene ring ceases to be an inanimate collection of lines and letters but teems with interest, like the foundation of a building upon which varying styles of superstructure may be built; so it is with the Benzene ring because by the rearrangement of the symbols new compounds may be constructed and the dormant possibilities are great, only awaiting the touch of the inventive chemist.

3. That the symbols used in chemistry which seemed so complicated and are so mystifying to the layman are only a system of shorthand to express long words in short terms and present formulae in a way to be easily read.

4. He has had a glimpse of the laboratory and how a chemist works, the materials and apparatus used, with scales so sensitive that a pencil mark on a piece of paper after weighing will show a variation when reweighed; the great part glass plays in his work, and the amount of patience that must be exercised and the very close attention that must be given to the minutest details.

5. He has learned much about liquids, solids, metals and their relation to each other, learned details regarding products he is now offering for sale and also learned about many others, bringing home the full realization that his product or line of products is but a small part of the chemical industry. It has given him greater vision, broadened him and given him more confidence. He has learned many little things that will be of help, for example the chemical names ending with ium refer to metals; and names ending with ate refer to oxides, also many other shortcuts to a better understanding of products included in the chemical industry.

The attendance at the lecture course will not entitle him to a chemist's diploma, but the information gained will allow him to engage in a more intelligent discussion with the customer. The little knowledge he has absorbed proves conclusively that chemistry is a big field and there is much more to learn, and if he be wise whenever a discussion with the customer becomes too deep he will stop and insist upon bringing an expert or a technical man to his assistance.

United States exports of medicinal and pharmaceutical preparations during 1922 were valued at $14,193,000, an increase in value of 12 per cent over 1921; perfumery, dentifrices, and other toilet preparations, $6,309,000, an increase in value of 33 per cent over 1921; soap, except toilet, 81,254,000 pounds, valued at $8,913,000, compared with 73,952,000 pounds in 1921, and alcohol 17,436,000 pounds, valued at $498,000, compared with 46,803,000 pounds in 1921.

HONORABLE MENTION—E. D. WARSHAUER

E. I. du Pont de Nemours & Co., Wilmington, Del.

CHEMISTRY since the war has reached a point where it is no longer considered only to be understood by professors, chemists or technical men. Most of us know or have heard of the uses of chemicals during the war and of how the United States Government actually created a new division of the Army, known as the Chemical Warfare Service, to develop chemicals for fighting. This division today is engaged in research work and will continue their experiments on a peace time basis for the good of the nation. Also pick up any magazine or paper and notice the names applied to various new articles advertised for sale. Quite a few will be of chemical extraction because the people are becoming more and more conversant with the terms and it is not necessary to revert back to the old stock words of yesterday to sell articles. Briefly, the public is becoming educated and with this in mind, we will try to show why the chemical salesman should have a thorough knowledge of his wares before starting out, in order to insure increased sales and be of greater value to his employer.

Our first subject to consider is the value of chemistry to the salesman for his own benefit. First of all, it helps him to understand his wares and enables him to make his own comparisons with other firms' products as an aid to selling. When new products are put out, he can tell immediately their value as compared to the old ones or can sometimes suggest new uses for certain lines. Many a salesman's suggestions in this way have proven very valuable to his firm and greatly increased his selling power.

And now we come to the value of chemistry as a selling aid. As most of us realize, it is impossible to talk intelligently about a subject unless we know something regarding it and in the selling of chemicals which embrace such a wide and varied field, one should certainly be equipped to discuss them with some degree of technical knowledge. Therefore, the chemical salesman of today should possess a reasonable amount of training in the fundamental principles of chemistry in order to become a good salesman. It is true that sometimes a man who has a pleasing personality may go out and take orders for chemical products from the people who have used these products for a long time but this same man is not equipped to develop new customers and introduce the products in new fields. Why? Simply because his knowledge of chemistry consists in knowing that his firm sells intermediates or pharmaceuticals. or whatever the chemicals might be, of a standard make and his duty is to sell all he can regardless of whether he knows anything about the product or not. In other words, he is not able to discuss the technical qualities of his products to such a degree that he can convince new firms of the desirability of using his company's products in place of their present source of supply. He is also handicapped in increasing his sales by developing new uses for his products with his regular customers.

Furthermore, the chemical salesman who is able to give information to his customers is always welcomed.

It is not always a question of dollars and cents in making a sale. Many buyers depend largely on the salesmen of reputable firms to keep themselves informed on the progress of certain lines. In view of this, the salesman must have a thorough knowledge of chemicals in order to give the desired information correctly. A number of chemicals today are sold on specification and the man who can quote immediately on a product which will meet certain specifications is more likely to receive the order than the one who is compelled to wire back to his firm before quoting. Then again in making a sale it is often necessary to talk to plant managers, superintendents and the men who actually work around the plant and handle the material. Where would the salesman be who was asked to demonstrate certain products before an audience of plant men if he did not have a knowledge of chemistry? And are firms willing to wait until until he can have a man sent out to demonstrate for him? Not in these days of careful buying when time means so much to almost every concern.

Often complaints are referred to salesmen for adjustment and his ability to determine if the quality of the product is not up to standard may save his company money and the usual long drawn out complaint correspondence which every firm has to contend with to some degree.

Sometimes firms will ask the salesman how to use certain products and if another product can be used to the same advantage. Technical questions of this nature cannot always be answered by the salesman as many firms employ technical men just to handle this end but sometimes the salesman is able to answer immediately and it is his knowledge of chemistry which has aided him.

And so it goes, each incident proving that the man with the chemical education has everything in his favor in making a sale and although one can sell chemicals without a knowledge of chemistry, he is not liable to develop into a valuable salesman and be of real service to his employer like the man who understands his wares from the ground up.

The future of the chemical industry in the country today is good. Germany is being gradually eliminated as a factor and that means the world will call on the United States for supplies. To meet this demand the young men of today must be technically trained not only in the selling end but in the manufacturing end also, because it is up to them to hold the business that is going to come our way. And to do this we must be able to manufacture the best material possible and that means, of course, we must have well trained chemists in order to carry on the work.

In conclusion, would say that such courses in chemistry as conducted under the auspices of the various Chemical Clubs and Associations are a big asset in keeping the question before us. They refresh the memory of the man who possibly has not had occasion to use his chemistry for some time and also aid the fellow who has not had a college or university training, and has only acquired his knowledge by experience and hard study.

Why not have more of them?

The commercial bribery bill, which was introduced into the Pennsylvania Legislature recently, has been passed and on June 29 was signed by Governor Pinchot. The immunity clause has been eliminated, leaving the measure much the same as the Massachusetts, Connecticut and New York laws. An amendment to the bill was made by adding a section providing that the practice of tipping be excluded.

HONORABLE MENTION—LOUIS F. LAIRD, Mallinçkrodt Chemical Works, Philadelphia

THE value of the knowledge of chemistry to a salesman is dependent primarily on two conditions:—The nature of the house which he represents, and the character of the salesman himself. If the house in question is what we might term a "one track" house, making one or two items which they have made for the past half century, never varying their line one iota, and disposing of their entire output to the same parties year after year, a knowledge of chemistry to the salesman representing this house would not be necessary. If on the other hand, the house is of a progressive type, with a desire to grasp all legitimate opportunities that knock at its door, it is an absolute necessity that the salesman representing it should have a knowledge of the science of chemistry.

In like manner we have two classes of salesman:—On the first hand is the salesman who has for a number of years called on the same class of trade week after week and month after month, never deviating from that one beaten path. To this class of salesman, a knowledge of chemistry is not necessary, since he constantly sells the same articles for the same purposes, and he may be better designated as a good friend of this small circle of customers, and an "order-taker" for his house. All he needs is a knowledge of writing and spelling.

On the other hand, is the salesman who is always on the alert. He also has his regular trade upon which he calls, but at the same time never misses an opportunity to meet a new prospective customer or to dig up new ideas for the house he represents. To this class of salesman, a complete knowledge of the science of chemistry in all its branches is very essential. He can never foresee what new things he is going to run up against, and for this reason is unable to look over his field before entering it, in order to prepare himself for what may come. Having this chemical knowledge, the impossibility of looking over his territory first will not worry him, and he can meet the various inquiries of his trade with that confidence and assurance, that before very long will make the word of himself and the house he represents, a power among all buyers of chemical goods. When any technical question arises—and not all buyers of chemical goods have access to their own sources of information, as chemists and laboratories—they will say—"Call Mr. So and So of the Blank Chemical Company. He can tell you what is causing your difficulty, and can sell you the right thing to correct the trouble." In this manner, many a new customer is made and held, and old customers who have been helped by the technical knowledge of the salesman are constantly boosting the house which this man represents.

He would also be equipped to go a step further, and point out to these various buyers certain ways in which they could economize in time and money, and produce a better product by buying a different chemical.

Quite often this type of salesman in his daily rounds will run across propositions that require a certain chemical which does not appear in his catalogue, but which

he knows, by his knowledge of chemistry, is a simple and inexpensive material to make, requiring liittle or no additional machinery in the factory, and which will make a very good customer out of a moderately good one, if he can persuade his house to produce it.

In the majority of instances, the men who do the buying, know little or nothing about the chemicals that they are purchasing, and depend entirely upon the knowledge and honesty of the salesman when making their purchases. If the salesman is not trained, at least in the rudiments of chemistry, he will not be in position to advise the buyer with regard to his purchases, and after one or two bad blunders, will make an enemy of him, which will extend to the house he represents, even should he be supplanted by a trained man. Too, this enmity very soon permeates the entire personnel of the house represented by the buyer. In due course of time, this buyer changes his position, and becomes buyer for some other house, carrying this enmity along with him into the new environment. In nine cases out of ten, his assistant becomes buyer in his original place, and follows the footsteps of his predecessor. In this manner, a very bad reputation can be quickly spread for any house which does business in such a slipshod fashion as to employ untrained men to represent them. Also, in many instances, the salesman is the only member of the manufacturing house that the buyer ever meets, and one can readily see how a very low estimate of the house would be formed by the low standard of the man representing it.

It is a well-known fact that in all lines of business it is impossible to get first class results by the use of second-class material; so how would it be possible for untrained men,—who would be better termed as second-rate material,—to bring forth first-rate results?

As concrete examples of the value of the knowledge of chemistry to a salesman representing a chemical manufacturing house, I might cite the following incidents, small in themselves, and yet of tremendous value to the buyers:—

The buyer of a certain pharmaceutical house called me on the telephone and explained that they were running a certain line in his factory requiring the process of oxidation, for which he needed either sodium nitrate or sodium nitrite. He could not make out which he wanted on account of the indistinct writing on the requisition, and asked me what he should purchase. Having a knowledge of chemistry—I very quickly straightened him out, sold him the sodium nitrate, and made a firm friend and booster for my house.

Another instance happened in this manner:—

The buyer for a certain house of manufacturing chemists informed me that a certain formula that they were running required four ounces of either quinine arsenate or quinine arsenite, but as he had lost or mislaid his paper containing the names of the ingredients necessary, he was not sure which one he wanted. He was sure, however, that he wanted the one containing the most oxygen, which very quickly told me which compound to send him.

As an example of the blunders easily made by the untrained salesman, I will set forth the following:—

A certain buyer placed an order for a quantity of ferric sulfate and the salesman being untrained in the science of chemistry, but knowing that "ferric" meant iron, wrote out the order to read—"Iron sulfate, U.S.P. Dried." This substance, according to the U. S. Pharmacopoeia is the ferrous salt and not the ferric. Had the salesman been properly equipped, he would have written his order for iron tersulfate, which is the ferric salt. In this manner, by filling the order according to the salesman's instructions a very nasty impression of ignorance was created in the mind of the buyer, which was afterward difficult to overcome, even though the mistake was rectified.

Another case, the straightening of which came under my supervision, is as follows:—A certain buyer placed an order for a quantity of potassium acid tartrate, which immediately stumped the salesman, owing to the fact that he had no knowledge of chemistry. He searched frantically through his price book, and much to his chagrin, could not find this article listed. Had he had some knowledge of chemistry, this little incident would never have caused him any trouble at all. He would immediately have written his order out under the caption—"cream tartar," the name applied to this substance in his price book. Not knowing this, however, he told the buyer he was sorry that he was unable to supply him with this item, as his house did not handle it. Upon his return to the office, the salesman mentioned this matter to me and asked what potassium acid tartrate was. In order to straighten the matter out, and not have the buyer lose confidence in the house, it was necessary to admit the ignorance of the salesman, which made it a very difficult proposition to correct.

The first two incidents we would call the positive examples of the value of chemistry to the salesman and the last two incidents, negative examples.

As the entire chemical world is rapidly becoming cognizant of the fact that this is the age of modern ideas and progressive business methods, makers are realizing more and more it is only the salesman of the "positive" type who can do them justice in the eyes of the buying world, and the "positive" type salesman can only exist where the knowledge of chemistry is complete.

NO FOREIGN CHEMICAL EXHIBITS ALLOWED

Chemical Exposition exhibitors will vote again on the question of whether the Exposition shall be held every year or every second year. A recent ballot by mail resulted in a tie, but only 25 per cent of the exhibitors voted. A proposition to hold the Exposition in Chicago every third year was voted down. It was decided not to allow exhibits of foreign chemicals, dyes, or equipment, but Canada is not excluded. Exhibitors will be asked to vote on a plan to issue two types of tickets, one for guests, which will be good from noon until closing, and one for general distribution, good only from 4 p.m. until closing.

The proposition to segregate exhibits according to similarity was not approved.

A. H. Pierce, Grasselli Chemical Co., 117 Hudson st., New York, was a prize winner in the golf tournament held in connection with the outing of New England Drysalters Club. Mr. Pierce had the lowest gross score in class "A" and was awarded the silver cup presented by the president of the club.

Dominion Tar & Chemical Co., Ltd., will erect a tar distilling and chemical manufacturing plant at St. Boniface, Man., at an estimated cost of $250,000. The company is a subsidiary of Burt, Boulton & Haywood, Ltd., London, England.

Dr. Ezra R. Larned, head of the department of experimental medicine of Parke, Davis & Co., died Tuesday morning, July 3, following an attack of heart disease. He was fifty-five years old.

New York Section of America Chemical Society will continue its radio service over WJZ on Thursday evenings during July and August.

OUTPUT OF VAT AND ALIZARIN DYES INCREASING, SAYS TARIFF COMMISSION

Dye Census Shows Export Trade Gained in Value and Quantity During Early Part of 1923—U. S. Producing 93.5 Per Cent of Colors Consumed

The "Census of Dyes and Other Synthetic Organic Chemicals" for the calendar year 1922, published by U. S. Tariff Commission, shows that during the year 1922 many products were manufactured for the first time in this country, and there were large increases in the quantity of production, with conspicuous reductions in prices. The domestic production of dyes in 1922 by 87 firms was 64,632,187 pounds, an increase of 66 per cent over that of 1921. The sales for 1922 totaled 69,107,105 pounds, valued at $41,463,790. The size of the industry in 1922 is in sharp contrast with that of 1914, when only seven firms manufactured a total of 6,619,729 pounds, valued at $2,470,096.

The average sales price of all domestic dyes for 1922 was 60 cents per pound, compared with 83 cents in 1921, and $1.26 per pound in 1917. The 1922 figures represent a 28 per cent decline from that of 1921. There were price reductions for both the bulk colors and dyes consumed in smaller quantities. The average price of indigo in 1921 was 45 cents per pound, compared with 24 cents in 1922, a 47 per cent decrease. Direct Black EW declined 47 per cent; Acid Black, 28 per cent; Salicine Black U, 27 per cent; Alizarin, 20 per cent; Alizarin Saphirol B, 34 per cent; Wool Green S, 41 per cent; Indanthrene Blue GCD, 30 per cent, and Eosine, 24 per cent.

One of the conspicuous developments of the year 1922 was the increased production of vat and alizarin dyes. The vat dyes are used in cotton dyeing and printing for the production of shades of remarkable fastness which are not destroyed by the modern laundry treatment. These colors are of great complexity and have presented serious difficulties in their commercial production. Their use is on the increase, as the public is beginning to recognize that fast shades are obtainable on cotton goods. The total production of vat dyes (not including indigo) was 1,075,992 pounds in 1922, compared with 345,152 pounds in 1921. The production of the anthraquinone dyes, which include alizarin dyes and a large part of the vat dyes, was 1,234,963 pounds.

Many important dyes were produced for the first time on a commercial scale in 1922. These comprise colors of great value for the dyeing of either silk, cotton, or wool, such as vat dyes, alizarin, developed cotton dyes, mordant and acid dyes. The increased production of these colors is reflected in a reduction of these imports. The production of these dyes in the United States has resulted only after large expenditures on research and painstaking investigations.

The United States produces about 93.5 per cent of the dyes actually consumed. The imports of dyes in 1922 totaled 3,982,631 pounds, the production was 64,632,187 pounds, and the exports totaled 6,956,593 pounds. Production of dyes in 1922, grouped by classes according to their method of application on fibers, was as follows:

	Pounds
Acid	9,880,014
Basic dyes	2,937,585
Direct cotton dyes	11,931,737
Lake and spirit soluble dyes	1,009,512
Mordant and chrome dyes	3,749,701
Sulfur dyes	16,913,767
Vat dyes (not including indigo)	1,075,992
Indigo	15,850,752
Unclassified dyes	1,283,127

Total imports of dyes during the calendar year 1922 were 3,982,631 pounds, valued at $5,243,258, compared with 4,252,911 pounds for 1921, and 45,950,895 pounds during 1914.

The exports of dyes for 1922 show a large decrease from that of 1921, receding from $6,270,155 in 1921 to $3,023,127 in 1922. Exports of dyes for the first four months of 1923 show an increase in value and quantity. This increased demand for American dyes, largely by the Far East markets, may be attributed in part to the reduced imports of German dyes on account of the occupation of the Ruhr by the French in 1923.

COULD NOT WORK GERMAN PATENTS SAYS GARVAN IN FOUNDATION SUIT

Small Price Fixed Was Based on Their Worthlessness Without Research Plant—Government Attempts to Prove That Advisory Sales Committee Received Benefits Indirectly

(*Special to* DRUG & CHEMICAL MARKETS)

Wilmington, Del., July 11.—In the course of the cross-examination of Francis P. Garvan in the suit by the Government against Chemical Foundation, Col. Anderson asked Mr. Garvan how he arrived at the price of $250,000 to be paid by the Foundation for the German patents.

"One reason was that the patents were worthless unless some concern put up a research plant and found out how to work them," Mr. Garvan replied, "Another reason was that licenses were to be non-exclusive. A third element was that nobody could get more than 6 per cent on their money. We were absolutely obligated to give a license to the Government. We had to trustee all common stock for seventeen years."

Col. Anderson produced evidence to show that from the directorships assigned him by the Custodian, Col. Douglas I. McKay, vice president of the Foundation, drew a total of $16,187. Most of the fees thus received by Colonel McKay were during the regime of Colonel Thomas W. Miller, the present custodian. George Corbett, vice president of Central Union Trust Co., worked as treasurer of the Foundation for nothing for a year and a half, but on resigning from the Trust company to devote his time to the Foundation, was made controller of Beer, Sondheimer & Co., Inc., at $15,000 a year.

As liquidator for 23 enemy insurance companies, the New York Trust Co. of which Otto T. Bannard, of the Custodian's Advisory Sales Committee, was chairman, received from the Custodian $42,070, besides $58,670 as a depositary for the Custodian.

Colonel Anderson took up the bill rendered the Custodian by ex-Justice George L. Ingraham, another member of the Advisory Sales Committee of the Custodian's office and Foundation trustee. His bill for legal services amounted to $30,831. Colonel Anderson produced a bill for $11,574 presented by Joseph H. Choate Jr. Mr. Garvan said that Mr. Choate received only $10,000 in his four years with the Foundation.

Joseph H. Choate, Jr., counsel to the Foundation testified regarding the formation of the Chemical Foundation and American Dyes Institute, and was cross-examined on his testimony given before the Ways and Means Committee in which he said he appeared for both companies.

Col. McKay has written to Francis P. Garvan pointing out that there was no connection, directly or indirectly between the Chemical Foundation and the companies under control of the Alien Property Custodian from which he received compensation.

QUOTATIONS ON CHEMICAL STOCKS

Closing Prices for Week Ending July 7

	Bid	Asked		Bid	Asked
Air Reduction	58¾	60	Heyden Chem.	1¾	..
*Allied Chem. & D.	65	66	Hooker Electro	55	65
*Allied Ch. & D., pf.	107¼	108⅞	Hooker Electro. pf.	60	70
*Am. Ag. Ch.	11¼	11⅞	*Household Products	30	30⅝
*Am. Ag. Ch., pf.	30¾	33	*Int. Agricult.	2¼	2⅝
*Am. Chicle	9¾	10	*Int. Agricult., pf.	8¼	9¼
*Am. Chicle, pf.	43	45	*Int. Nickel	11¾	12
*Am. Cot. Oil	4¼	5	*Int. Nickel, pf.	77½	83
*Am. Cot. Oil, pf.	14¼	15½	*Int. Salt	..	89⅛
*Am. Cyan.	48	51	*Mathieson Alk.	39	40
*Am. Cyan., pf.	73	75	Merck & Co., pf.	84	86
*Am. Druggist S.	4½	4⅝	Merrimac	96	..
Am. Glue	82	85	Mulford Co.	29	34
Am. Glue, pf.	124	126½	Mutual Co.	150	..
*Am. Linseed	18½	21	*National Lead	110	112
*Am. Linseed, pf.	40	42	*National Lead, pf.	106¼	109⅜
*Am. Malt	12	13	N. J. Zinc	148	152
*Am. Zinc	8¼	8½	Niag. A., pf.	96	100
*Am. Zinc, pf.	34	36½	Parke, Davis & Co.	77	..
*Atlas Powder	..	162	Penn Salt	80	..
*Atlas Powd., pf.	89	90	*People's Gas, Chi.	86¼	88
By. Prod. Co.	67	72	Procter & Gamble.	124	128
Carborundum	133	135½	Procter & Gam., pf.	102	106
Carborundum, pf.	115½	116	Royal Bak. Po.	122	130
Casein Co.	60	65	Royal Bak. Po., pf.	98	101
Celluloid Co.	85	90	Sherwin-Williams	28	28¼
Celluloid Co., pf.	108	111	Sherwin-W., pf.	100¼	..
Ches. Mfg.	220	230	Stand. Ch.	90	100
Ches. Mfg., pf.	108	113	Swan & Finch	25	30
Com'l Solv. A.	24	25½	*Tenn. C. & Chem.	85⅛	87⅛
Do B	17	19½	*Tex. Gulf. Sul.	55¾	56⅝
*Corn Products	119⅛	119¼	Union Carbide	52¾	52½
*Corn Products, pf.	116	119	Union Sulphur	..	..
*Davison Chem.	34⅛	34¼	*Un. Drug	75	76
Dow Chem, non par.	40½	..	*Un. Drug, 1st pf.	46¼	48
Dow Ch., pf.	..	96	*Un. Dyewood	40	60
Du Pont de Nem.	111	113	*Un. Dyewood, pf.	80	95
*Du P't de Nem. Db.	82½	84	Un. Gas Imp.	48¾	49¼
Eastman Kodak	103½	104	Un. Gas Imp., pf.	55¾	..
Eastman Kodak, pf.	108½	..	U. S. Gypsum	51	55
*Freeport Tex., Sul.	10½	10⅞	*U. S. Indus. Al.	47⅛	47¾
Freept. Tex. Sul., pf.	91	93	*U. S. Indus. Al., pf.	92¾	96
*Grasselli	125	138	*Va.-Car. Ch.	7¼	7¾
*Grasselli, pf.	102	105	*Va.-Car. Ch., pf.	20¾	22
Hercules Powder	100	105	*V. Vivaudou	16	16½
Hercules Powd., pf.	102	104			

*Listed on New York Stock Exchange

CHEMICAL COS. PAY LARGER DIVIDENDS

Chemical companies have shown good earnings during the last quarter, as indicated in the following table, giving dividends for the quarter ending June 30:

	New Rate		New Rate
American Smelt & Refin.	$1.25	International Silver	1¼%
American Cyanamid	1%	Merrimac Chemical	*2%
Calumet & Hecla	$10.00	Merck & Co., pf.	2%
Coca-Cola	1.75	MacAndrews & Forbes	*1%
Corn Products	*1½%	New Jersey Zinc	*2%
Continental Can	$1.00	Parke-Davis	*3%
Eastman Kodak	*.75	St. Joseph Lead	*.25
Household Products	.75	United Drug	1½%

*Extra payment in addition to regular dividends.

Casein Co. of America (Delaware) has declared a quarterly dividend of 1 per cent, payable Aug. 15 to holders of record on Aug. 7. Casein Co. of America (New Jersey) has declared a quarterly dividend of 2 per cent on the preferred stock, payable July 31 to holders of record on July 30.

Haines Shellac Works, 2534 E. 177th st., New York, has filed a petition in bankruptcy, with liabilities $15,064, assets $9,811. Principal creditors are Marx & Rawolle, $6,543; Mac-Lac Co., $1,175; and Cosmopolitan Bank, $1,500.

E. R. Smead & Co., chemicals and oils, New York, have obtained judgment against Samson Rosenblatt, New York, for $2,763. Geigy Co., Inc., has filed judgment for $101.08 against Thomas F. O'Keefe,

Receivers have been appointed for Goldine Mfg. Co., Albany and Troy, medicinal products, on petition of F. A. Thompson & Co., Detroit. Liabilities $15,000 and assets $35,000.

Nitrate Agencies Co. has obtained judgment for $1,205.03 against Jacob Weinberger.

SEYDEL CO IN RECEIVER'S HANDS

Liabilities Estimated at $1,119,517, and Assets Valued at $1,878,718

Seydel Chemical Co., Jersey City, with offices at 120 Broadway, New York, filed a voluntary petition in bankruptcy in the Federal Court at Trenton, N. J., on Thursday, July 5. The liabilities are $1,119,517, composed of taxes $1,741, wages $6,200, secured claims $872,032 and unsecured claims $239,543.

The assets are $1,878,718, consisting of cash on hand $1,136, bills, promissory notes and other securities $13,917; stock $70,861, carriages and other vehicles $6,155; machinery, tools, $1,681,724; patents, copyrights and trademarks $1,733; other personal property $28,060; debts due on open accounts $43,219; stocks, negotiable bonds, $375; policies of insurance $12,083; unliquidated claims $5,801; deposits of money in banks and elsewhere $11,648, and property in reversion, $2,000.

Collins, Doan & Co., 196 Morgan st., Jersey City, in asking for the appointment of a receiver, stated that they were creditors of the chemical company to the extent of $295 and that it was necessary that a receiver should be named to complete products now in course of manufacture.

Collins, Doan & Co. also declared that the Seydel company operates a chemical plant at Nitro, West Va., where paranitraniline, benzoate of soda and minor chemicals are manufactured; that there is material in process of manufacture that has a sale value of about $50,000, according to information in the possession of Collins, Doan & Co., which, it is said, can be completed at an approximate cost of from $10,000 to $12,000. It was said that it is imperative for the preservation of the materials that their manufacture be completed.

Edward I. Edwards, of Jersey City, has been appointed receiver under a bond of $25,000 and has been empowered by Judge Joseph L. Bodene to operate the chemical company business until appointment and qualification of a trustee or until further order of the court. The company's petition has been referred by Judge Bodene for a hearing before Referee George R. Beach, at his chamber in Jersey City on July 18.

New Incorporations

Chemical Industry

World Bestos Corp., Dover, Del., $32,000,000. To operate chemical, physical and other laboratories. H. R. Davies, White Plains, N. Y.; J. S. Schilinick, Brooklyn; I. M. Beatton, New York. Corporation Trust Co. of America.

Mardon Chemical Corp., Dover, Del., $10,000. B. L. Norton, Larchmont, N. Y.; E. C. Ballantyne, Jersey City, N. J.; Theodore F. von Dorn, New York. Capital Trust Co. of Delaware.

Acme Shellac Products Corp., New York. $25,000. M. B. Lew, E. Weiner. Attorney, L. Zimmerman, 63 Park Row.

Kerchman & Kerchman, New York, drug sundries, $10,000. M. and S. and A. Kerchman. Attorney H. Rosenblatt, 200 Broadway.

Consuming Industries

Cellulose Utilities Corp., New York, $1,000,000. U. S. Corporation Co.

Purity Ice Cream Co., Wilmington, Del., $100,000. Corporation Service Co.

Kum-Kleen Products Co., Dover, Del., $75,000. Make polishing compounds. B. B. Marypeny, H. R. Mason, W. G. Ossman, Pittsburgh. Capital Trust Co. of Delaware.

Tromite Corp., Carteret, N. J., soap. Plumer Wheeler, Louis Neuberg, Carteret.

Paper Mills Corp., Wilmington, Del., $5,000,000. Corporation Trust Co. of America.

Gabis Oil & Chemical Corp., Linden, N. J., $25,000. A. J. David, M. S. Graff, Hyman Rosenfeld, Linden.

Westfield River Paper Co., Russell, Mass., $1,000,000. Alfred H. Chapin, Springfield, Mass.; Karl Becker, New York; Folke Becker, Springfield.

Nu-Youth Chemical Laboratories Co., Columbus, O., $125,000. Toilet preparations.

Everhot Chemical Co., 180 Boyd st., Newark, N. J., $250,000. Make chemical bags.

The Heavy Chemical Market

Current Spot Quotations of Heavy Chemicals, page 98

IMPORTED AMMONIUM CHLORIDE DECLINES

Spot White Offered at 5½c—Arsenic Prices Under Pressure as Holders Tire—Powdered Potash Chlorate Cheaper Spot and Shipment—Soda Bichromate off—Market Generally Weak

PRICE CHANGES IN NEW YORK
(Stocks in First Hands)

Advanced
No Advances

Declined

Ammon. Chlor., white, Imp., ½c lb.
Gray, Imported, ½c lb.
Arsenic, White, spot, 1c lb.
Calcium Arsenate, 1c lb.
Sodium Bichromate, ¼c lb.
Paris Green, resale, 1c lb.
Potash, Caustic, Imp., ¼c lb.
Pot. Chlorate, Powd., Imp., ½clb.
Prussiate, Soad, ½c lb.
Potash, yellow, 3c lb.

Trend of the Market

	Today	Last Week	Last Month	Last Year	War Peak	Pre-War
Acetic Acid, Glacial....lb.	$.12¾	$.12¾	$.12¾	$.08½	$.19½	$.07
Sulfuric Acid, 66 deg..ton	15.00	15.00	15.00	14.00	55.00	20.00
Ammonium Sulfate..100 lbs.	3.15	3.15	3.20	2.85	7.50	1.50
Bleaching Powder..100 lbs.	1.75	1.75	1.90	1.60	9.50	1.60
Copper Sulfate ....100 lbs.	5.50	5.50	5.75	5.95	20.00	4.50
Potash Caustic .....lb.	.07¼	.07½	.07¾	.05¾	.87	.08
Soda Ash, 58 p.c....100 lbs.	2.00	2.00	2.00	2.00	3.50	.60
Caustic Soda, 76 p.c.100 lbs.	3.70	3.70	3.70	3.71	9.50	1.42
Potassium Bichromate ..lb.	.11	.11	.11¼	.10	.65	.06¼
Sodium Prussiate .....lb.	.14	.14½	.16½	.22	1.25	.18
Average	3.134	3.142	3.197	3.048	10.79	2.99

Business has been slow enough during the week past to make it well nigh impossible to determine the exact position of the market for industrial chemicals. With few inquiries and fewer sales, any of the many widely separated figures might be called the market price for any product in question. Manufacturers name one level, importers another, and resellers of all classes of goods still another. The tendency of prices is still downward, although in some quarters the resistance to further shading has become stronger. Accumulations of imported materials, some of them in hands none too strong, represent the greatest menace to a stable market at this time. On top of this already existing condition, shipment prices abroad for various heavy chemicals are cabled easier. This latter tends to unsettle further the spot market. Consumers continue to hold aloof and are likely to as long as chemical prices slide off. Arsenic, oxalic acid, bichromates, tin and lead salts, ammonium chloride, prussiates, potash chlorate, aluminum sulfate, epsom salt, represent the more important easier products, some in the hands of domestic makers and others held by importers.

Acid Acetic—Prices steady at prevailing levels although demand is not as active as formerly noted. Makers name schedule unchanged at $3.38@$3.63 100 lbs. for 28% bbls. works; 56% at $6.75@$7.00 hundred; 70% $8.38@$8.63; glacial $12.75@$13.53 hundred.

Acid Muriatic—Moving steadily, but not as much new business on contract or for prompt shipment. Makers continue operations to take care of orders on hand. Reserve stocks small. Prices firm at $1.00@$1.10 hundred, 18 deg. in carboys or 20 deg. in tanks; 20 deg. in carboys $1.25@$1.50; 22 deg. carboys, $1.75@$2.00 hundred.

Acid Oxalic—Still soft at the low prices previously established by keen competition. Demand continues dull. Prices vary as to source, 12¼c@12½clb. f.o.b. works in bbls.; bbls. at New York 13c, kegs 13½c. Imported 13c spot N. Y.

Acid Sulfuric—Demand for sulfuric has fallen off to some extent both on contract shipments and new business. Some plants are beginning to build up surplus stocks. Movement of goods, however, from works on old orders continues steady. Prices for 66 deg. f.o.b. works, tanks, unchanged at $15.00@$16.00 ton; carboys in carlots $1.25, less to $1.75 hundred. Oleum $19.00 ton works tanks, $1.25@$1.50 carboys; 60 deg. $9.00@$10.00 ton works, tanks.

Acetone—Methyl acetone strong at recent advance to $1.00@$1.05 gal. C. P. acetone stocks limited at 25c lb. drums, works; resale spot 30c gal.

Aluminum Sulfate—Prices easy and tend to dip down on individual orders in competition. Named at $2.50 hundred by makers for iron free but reported shaded to $2.25. Technical grade $1.40 carlots works.

Ammonium Chloride—Imported grades have declined further this week. Spot white from 5½c@6½c as to seller. Gray lower at 7c@8clb. spot casks. Domestic white bbls. spot 7¼c; gray 8c lb. Cheaper for shipment from abroad.

Arsenic—Again weaker on lack of demand reflected from stagnation of calcium arsenate stocks. Odd lots of white arsenic in hands of tired holders offered spot at 12c during the week, with indications that this figure might be broken in order to move some lots. Leading factors, however, are refusing to drop under 13c lb. Appearance that neither holders nor consumers of arsenic have much faith in the immediate future of the market. Futures at 10c@11c. Calcium arsenate not moving as it should at this season. Price named at 15c but 13c believed to be nearer level at which business might be done. Red arsenic scarce and firm at 15½c spot. Cable abroad for 15 tons brought no response, indicating no stocks.

Bichromates—Demand continues small enough to offset reduced production by a leading maker due to labor difficulties. Prices are soft in spite of the lessened output, at 11c lb. for potash, works, and 8c@8¼c lb. for soda.

Bleaching Powder—For all practical purposes, the market is $1.75 hundred, drums, works, on contract, carlots, although some makers still name $1.90. Stocks at works are ample, according to reports from makers, and buying is hand-to-mouth. Neither the maker nor the buyer want to stock bleach in any quantity at this season, the product deteriorating rapidly even in cold weather.

Epsom Salt—Imported spot U.S.P. easier at $1.75 hundred, bbls. Domestic makers at $2.25@$2.50 hundred, cars and less, bbls. Report steady movement on old contracts. Preferred by some consumers even at ½c premium over imported goods.

Glaubers Salt—Steady with stocks not large and fair movement of goods reported for the season. Technical imported at 85c up to $1.00 hundred spot; domestic makers $1.15@$1.30, 200 lb. bags, carlots and less, works. USP, imported spot, bbls. $1.25; domestic $1.40, carlots, works; $1.75, less cars, spot.

Paris Green—Cheaper lots standard goods in outside hands at 27c arsenic basis, 500 lb. kegs, on spot. Makers not shading 29c basis. Demand hand-to-mouth only.

Potash, Caustic—Imported spot has apparently hard-

ened at a slightly lower price, 7¼c lb. Makers, 88-92 drums, works, unchanged at 9c lb.

Potassium Chlorate—Cheaper lots of imported powder, kegs, N. Y. offered on cheaper shipment prices and lack of demand. Named from 6½c to 7c lb. as to seller. Domestic powder 8½c. Imported crystals, 7c spot; makers 8½c lb.

Prussiates—Soda prussiate easier at 14c spot. Makers at 15½c unchanged. Potash yellow as to seller ranges from 31c up to 34½c lb. Competition is keen. Red prussiate is dull and held at 65c lb. although it is difficult to say what price a big inquiry would bring out.

Soda Ash—Steady movement although not as heavy as last month. Spot business fair, but confined to small lots. Prices unchanged and steady at $2.00 bags; $2.25 bbls., spot, less cars. Contract $1.45 57% cars, f.o.b. works.

Soda Caustic—Heavy movement of goods from makers reported. Spot business has been spotty during the week, varying according to sellers. Prices are unchanged generally. Spot and f.a.s. standard brands named at $3.30, although $3.25 is reported being done. So-called "outside" brands offered down to $3.10 spot, all less cars. Contract $3.16½ hundred, 76% solid, drums, f.o.b. works, unchanged.

Tin Salts—Tin crystals unchanged at the reduction reported last week, makers naming 30½c lb. bbls., works. Soft in sympathy with metal position, as are the other tin salts.

DAVISON CHEMICAL REPORTS DEFICIT

The consolidated statement of Davison Chemical Co. and Davison Sulphur & Phosphate Co. for 1922 shows gross income to be less than half that reported in 1921, and indicates a deficit of $502,532, after interest, depreciation and reserves. The deficit compares with one of $411,938 in 1921. The gross income for the year ended December 31, 1922, was $240,421, compared with $530,962 in 1921, and $2,016,022 in 1920. The consolidated balance sheet of the two companies shows cash to the amount of $357,286, compared with $344,063, and accounts and notes receivable of $666,110. Notes and accounts payable amounted to $1,215,212.

In remarks to stockholders, President C. W. Miller says: "Royal Dutch interests have contracts with us for silica gel process not only covering first plant now under way for their New Orleans refinery but also looking to its use in all their refineries throughout the world. New Orleans plant should be in operation in five or six months. Contracts with other large refineries are under negotiation. Although we, with others, have had losses in past two years, your company has since 1916 put $2,347,160 into property from net earnings. Construction program outlined in 1918 has been completed, and of $7,000,000 required, approximately 40% was provided through sale of stock, 32 per cent from profits and 28% from funded debt. Approximately 80 per cent of assets belong to stockholders."

CHEMICALS USED IN STEEL MAKING DISCUSSED BY WILLIAM A. FORBES

Metallurgist of U. S. Steel Corp. Tells How They Are Applied in Manufacturing Process—Complete Chemical Analysis Marks Every Step

In a paper read before the American Iron and Steel Institute, at the recent meeting in New York, William A. Forbes, metallurgist of U. S. Steel Corp., told about the work of the chemical laboratory, the analysis of raw materials used in the steel industry, and the uses to which various chemical products are put. He said in part:

"Both the quality and amount of all materials involved in steel making processes are governed by chemical analysis, which is also employed to determine whether the steel produced is of the desired grade for rolling, forging or casting. In fact, every step in the production of steel is marked by a complete chemical analysis, from the raw materials going to the blast furnace to the final treatment before the finished part is placed in track, structure, machine or wherever it is destined to serve.

"It is estimated that the iron and steel industry uses in the neighborhood of 15 per cent of the total sulfuric acid manufactured in this country for 'pickling' and the manufacture of sulfate of ammonia.

"Calcium carbonate (limestone) is one of the three principal iron smelting materials and is used as a flux in the blast furnace. Lime is an important base and this quality makes it valuable in basic steel making processes. Another important use follows 'pickling' of finished steel products in acid. Such steel is washed with water and then immersed in a dilute lime solution, which performs the triple function of neutralizing any acid that may remain on the steel, coating to prevent oxidation, and lubricating the piece for subsequent drawing, as is the case with wire rods.

"Sodium chloride (common salt) is used to clean the scale from plates during rolling. A liberal quantity of salt is sprinkled on the plate just before entering the rolls and the combination of heat and pressure causes the water of crystallization contained in the salt to explode, cleaning the plate readily.

"Sodium carbonate (soda ash) and other chemicals are used for water softening to neutralize the hardening effects of lime and magnesium salts, which otherwise would soon interfere with mill operations by forming a deposit in boiler tubes. Soda ash is also used to clean tank cars and other receptacles for such material as benzol.

"Sodium silicate (water glass) is used to make a paste of fireproofing material for repairs to furnace walls, boiler settings and stack linings.

"Calcium carbide and oxygen are employed at all steel works for cutting and welding by the oxy-acetylene flame.

"Borax is used as a flux in welding.

"The fact that every chemical has a definite melting point is taken advantage of in heat treating. Such compounds as sodium nitrate, potassium nitrate, and others are used to determine heating and quenching points very accurately. Rolling temperatures of sheets and other products may be definitely determined by dropping on the steel, crystals of potassium and other salts, the melting points of which are known.

"When small steel parts such as cutting tools or dies are required with a very clean surface, tempering in a bath of molten barium chloride prevents scaling or oxidizing.

"Barium carbonate and other carbonates are used in case hardening to increase the activity of carbon in the carbonizing medium.

"Steel placed in a solution of copper sulfate may be plated with metallic copper by electrolytic action.

"Copper sulfate is used to determine the uniformity of galvanizing, and lead acetate to determine the amount of galvanizing.

"In addition to these and many others, the steel works chemical laboratories have a complete assortment of all the chemicals required for tests and analyses."

The Intermediate and Dye Market

Current Spot Quotations of Intermediates, see Chemicals, page 102

CRESYLIC ACID AND PHENOL LOWER

Larger Offers of Cresylic on Spot—Increased Output of Natural Phenol and Little Demand for Spot Goods —Naphthalene Weakens—Aniline Prices Steady.

PRICE CHANGES IN NEW YORK
(Stocks in First Hands)

Advanced
Ortho-toluidine, 2c lb.

Declined
Cresylic Acid, 10c gal.
Naphthalene, resale flake, ¼c lb
Balls, resale, ½c lb.
Phenol, spot, 3c lb.
Acid H, 5c lb.
Benzidine Base, 2c lb.

Trend of the Market

		Today	Last Week	Last Month	Last Year	War Peak	Pre-War
Benzene, pure	gal.	$.27	$.27	$.30	$.30	$1.10	$.25
Naphthalene flake	lb.	.07¼	.07½	.08½	.07	.16	.03
Phenol, Spot	lb.	.37	.40	.50	.12	1.50	.08
Toluene, pure	gal.	.29	.29	.30	.30	..	..
Aniline Oil	lb.	.16	.16	.16	.14	1.40	.10½
Alpha-naphthylamine	lb.	.35	.35	.35	.30	1.25	..
Benzaldehyde	lb.	.75	.75	.75	.65	..	..
Betanaphthol, dist.	lb.	.22	.22	.23	.23	1.50	.68
Dimethylaniline	lb.	.41	.41	.41	.32	1.30	..
Paranitroaniline	lb.	.74	.74	.74	.75	1.85	.18
Average		**.369**	**.373**	**.380**	**.331**	..	..

Lack of business has softened the whole structure of the market for coal-tar crudes and intermediates. Although manufacturers show little inclination to openly shade prices, such goods as are held in resale hands are steadily working lower as holders cut little by little in an effort to move their stagnated stocks. In a number of products, prices for outside goods have sagged far below makers' openly named quotations. Just how long the makers will hold aloof and refuse to meet this competition will undoubtedly be determined by the developments of the market over the next month or so. If any sign of strengthening is noted, producers will undoubtedly stand pat and wait for a turn in the market. Continued dull business will undoubtedly find them down to the levels of resellers. At present, lower prices are failing to stimulate business, price shaders doing little more than those who maintain their quotations stiffly. Both cresylic acid and phenol have declined again this week. Resale naphthalene continues to sag with little demand. Aniline oil holds firm through the general weakness. Beta-naphthol is soft. Offers of cheaper benzidine base are heard.

Coal-Tar Crudes

Benzene—Only very limited quantities have been going into the manufacture of intermediates. Solvent demand has been small. Steady call, mostly on contract, for motor fuel purposes, but the heavy stocks of gasoline and less consumption tend to reduce absorption along this line. Reserve stocks of benzene are reported heavy with production remaining active. Prices unchanged at 25c gal. tanks for 90% material, and 30c gal. in drums. Pure goods quoted at 27c gal. tanks, 32c drums.

Cresylic Acid—Reduced buying and larger stocks as a result of recent imports have caused a further recession in cresylic prices here during the week. Offers of pale acid down to 85c gal. were reported. From this figure, all the way to $1.00 was heard. Lots of crude material are offered spot at about 70c gal. but little demand is noted for this grade. Although total spot stocks are not large, they are comparatively heavy when the condition of the market for a number of months past is considered. Coupled with a better supply, buying has slowed down. Of course, the spot position is sensitive and would respond quickly to any increased absorption.

Naphthalene—Demand continues inactive. An inquiry in the market is usually the means of further shading prices of goods in resale hands. Prices for spot flake and balls have slid off slightly during the week. Spot flake is named at 7¼c lb. as compared with 7½c last week, 8c two weeks ago, and 9c two months ago. Makers adhere to 7c. Balls are 8c spot. Makers quoting chipped and crushed at 6c f.o.b. works. Good imports of crude were noted last week at New York. Considered as a unit, the American naphthalene market is potentially strong with stocks below normal. The stagnant demand, however, overshadows this factor just at the moment.

Phenol—Prices for spot drums are lower at 37c lb. Demand has practically dried up. The maker of natural phenol has increased production and is taking care of a larger proportion of the available business at 28c lb. This has had its influence in bringing down prices. A leading maker of synthetic goods, however, quotes 50c lb. unchanged for spot or future, and refuses to shade. Claims any buying would clean out spot market overnight. Some dealers, however, say that phenol will continue to drop until 28c the price for natural, is reached if demand does not pick up. At the same time, very little actual buying would be needed to send the price back over 40c, seems to be a general opinion. Others state that the market will settle down at about 30c and stay there until the price for natural is changed.

Pyridine—Extremely scarce with some imports noted. Prices and stocks abroad reported high and scarce. Spot goods at $3.75@$4.25 gallon.

Solvent Naphtha—Stocks are still small and good grades hard to locate. Prices unchanged at 35c gal. tanks; 40c drums, works.

Toluene—Apparently not in so strong a position. Stocks reported improving. Demand is in keeping with the market generally. Producers name 29c gal. tanks, 34c drums, works.

Intermediates

Acid H—Steady movement of goods reported on old contracts. Makers are still operating on this product although goods for prompt shipment are not in active demand. Prices reported easier 75c@77clb., works.

Aniline Oil—Although spot demand has continued slack, steady absorption on contract has held prices steady at 16c lb. drums carlots; 17c less cars. Resellers who hold stocks are naming the same prices as makers. Producers reported keeping plants running on orders already sold.

Aniline Salt—Little activity has been reported. Makers quote 24c@25clb. without change. Plants report good stocks.

Benzaldehyde—One of the few strong spots in the market. Holds firm at 75c lb. for technical from makers. Stocks still small.

Benzidine—Base is offered cheaper at 80c lb. bbls. in large lots and 82c@83c in smaller lots. Demand reported at a standstill.

Beta-naphthol—Easier and reported subject to shading. Makers name 22c and 23c lb. works, but resale stocks are heard down to 20c lb. Demand continues inactive.

Dimethylaniline—Little activity. Prices unchanged at 41c@42clb. drums works. Demand has fallen off materially.

Nitrobenzene—Demand continues small. Prices are unchanged from makers at 9½c@10clb. for crude and 10c@11clb. as to seller and quantity for refined in drums.

Orthotoluidine—A leading maker has moved quotations up to 18c lb. works. Last heard figures were 14c @16clb. as to quantity.

Para-nitroaniline—No change is reported. Little demand is noted and there has not been enough business to cause price shading. Makers quote 74c@75clb.

Lebanon Chemical Co., Inc., has opened a new plant on the Blackstone River, Pawtucket, R. I. This company manufactures acetate of chrome, sulfocyanide of alumina, print colors, pigment colors, Fast Steam Black L B, sulfonated castor oil and tallows. The officers of the company are E. J. Duffy, president and treasurer; William J. Cullen, vice-president; James J. Hand, secretary.

DYE IMPORTS IN JUNE LESS THAN MAY

Imports of coal tar dyes for June totaled 247,174 pounds, with an invoice value of $257,803. The following table shows the monthly imports through the port of New York from the first of the year.

Month—	Pounds	Value
January	179,309	$185,344
February	191,709	199,640
March	312,809	301,436
April	242,022	256,751
May	261,869	292,340
June	247,174	257,803

The five dyes leading in quantity imported were patent blue, indanthrene brown R, pyrogene blue, erio blue AB, and ciba violet B. Of the total quantity imported in June, 50 per cent came from Germany, 35 per cent from Switzerland, 10 per cent from Italy, 3 per cent from England, and 2 per cent from Canada.

The imports of synthetic aromatic chemicals for June totaled 6,397 pounds, with an invoice value of $16,850. The imports of medicinals, photographic developers, and other coal tar chemicals for June totaled 216,538 pounds with an invoice value of $30,292.

Ford Motor Co., of Canada, is constructing at Walkerville, Ont., a by-products coke plant for producing benzol for motor fuel. The plant will cost about $500,000.

COL. H. A. METZ SAYS HIS TESTIMONY IN PATENT SUIT WAS MISREPRESENTED

Cites Retraction Published by a Wilmington Paper—Objects to Statements Concerning Evidence Obtained for Use of Senator Moses—Col. Anderson's Defense of Metz

Col. Herman A. Metz, who has been a witness in the suit of the Government against the Chemical Foundation, Inc., at Wilmington, Del., claims that his testimony was grossly misrepresented in the reports out. He issued the following statement:

"The Morning News of Wilmington, Del., on June 26, 1923, published an article purporting to give my testimony as a witness for the Government in the suit of the United States against the Chemical Foundation, Inc.

"This article stated in effect that I had paid money to German spies, one of whom was under indictment as a fugitive from justice, for information extracted from War Department files and used by United States Senator Moses in a senatorial dye investigation.

"On June 27, 1923, the Wilmington News published a complete retraction of this article, stating among other things that their previous publication to the effect as above stated was false in every particular, and further that they were neither reproductions of the testimony not fair paraphrases thereof.

"They also stated that their representative was not at the trial; that the testimony as printed in the News was not given at the trial; that I did not admit I had paid any person shown by the testimony to be a German spy any sum of money whatever; that I had never employed any person charged with being a German spy to get any information from the War Department, and that there was no testimony given that the persons named in the article were German spies.

"Although counsel for the defendant charged in court that I was the invisible plaintiff in the suit and had instigated the Government's action, I swore that I was in Europe when President Harding demanded the return of the patents, and that I had never discussed with any official of the Government the matter of the present suit. Assistant United States Attorney General Henry W. Anderson, during the trial at Wilmington, offered in evidence a large number of communications addressed to me by Secretary Bryan, Secretary Lansing, Ambassador Gerard, Ambassador Page, and other Government officials, for the purpose of showing that all my actions in connection with the dyestuff situation were undertaken and carried out with the full knowledge of the Government, and by their advice and sanction.

"On June 26, Col. Henry W. Anderson, Assistant Attorney General, made the following statement to the court concerning myself, which I have not seen printed in any newspaper:

"'The character, standing, loyalty, integrity and every other quality that this witness possesses was attacked on cross-examination, and the witness was, with counsel acting well within his legal rights, restrained to a very limited reply to those questions. It is not only the right of the Government, but that which is due in fairness to the witness himself, to let the facts as fully as I know them to be brought out, so that the testimony of the witness may be complete for the consideration of the court. This man is engaged in a large business. I say again, counsel acting within his rights attacked this witness and his credibility and his character and loyalty with a severity that I do not recall having before witnessed, and the evidence already in this case justifies, in my judgment, the statement that this is but a part of a long continued controversy. Those things, unless the full facts are brought out as far as one can on sudden notice of this kind, are liable to do irreparable injury to an individual when there is no redress, because these things done in a court of justice afford no redress. Therefore, while I deem all of that matter as immaterial, and have so stated, those questions having been gone into, in my judgment, it is my duty to the full extent that I on short notice have a chance to do so, to bring out every fact in order that the whole picture may be observed, because on cross-examination a witness is not allowed to talk, he is not allowed to explain, he is not allowed to tell his motives, he is just pinned down to practically bare statements and half proof.'"

The Oil Market

Current Spot Quotations of Oils, Tallows, Greases, page 113

VEGETABLE OIL PRICES STILL SLIPPING

Fewer Changes in Fatty Oils, but all Downward and Confined to Vegetable Group—Rate of Decline Not as Rapid—Coconut, Soya Bean, and Chinawood Oils Weak—Buyers Apathetic

PRICE CHANGES IN NEW YORK
(Stocks in First Hands)

Advanced
Turpentine, Spirits, 3c gal.

Declined

China Wood Oil, spot, 2c lb.
Tanks, & Forward, 2c lb.
Corn Oil, ref., ¼c lb.
Crude, bbls., N.Y., ½c lb.
Linseed Oil, spot, 3c gal.
Peanut Oil. ref., ¼c lb.
Sesame Oil, 10c gal.
Soya Bean, Crd., Coast, ¼c lb.

Trend of the Market

	Today	Last Week	Last Month	Last Year	War Peak	Pre-War
Cod Oil, N. F.....gal.	$.70	$.70	$.70	$.56	$1.26	$.36½
Degras, American, bbl..lb.	.04	.04	.04½	.04	.25	.03½
Lard, No. 1.....gal.	.79	.79	.86	.80	2.90	.92
Menhaden, crd., bbls..gal.	.48	.48	.50	.35	1.20	.33
Neatsfoot, 20 deg. c.t.gal.	1.25	1.25	1.25	1.80	3.45	.95
Red Oil, distilled.....lb.	.09½	.09½	.10	.08½	.17	.07
Stearic Acid, T.P.....lb.	.14½	.14½	.14¾	.10½	.33	.12
Coconut, Ceylon, bbls..lb.	.09½	.09½	.10¼	.08¼	.90	.14
Cottonseed, crude, tks..lb.	.10	.10	.09¾	.09¼	.25	.08
Linseed, carlots .....gal.	1.08	1.12	1.14	.86	1.88	.57
Olive, denatured .....gal.	1.10	1.10	1.17	1.12	4.50	1.05
Peanut, refined .....lb.	.16	.16¼	.16½	.13¾	.30	.08
Soya Bean, bbls.....lb.	.12	.12	.13¾	.11½	.19½	.07
Average	0.471	0.478	0.492	0.474	1.30	0.362

Such changes as have been made in the fatty oil situation during the past week, were mostly slight revisions of quotations toward lower levels. The vegetable oil situation continues weak and the price trend is still downward. Practically all the reductions among the oils since the last report have been confined to the vegetable group. Fish and animal oils show little change and are marking time at formerly noted quotations. Although the tendency of prices is downward, the degree of descent is not as rapid as the movement of the past month. As prices reach new low levels, sellers become less ready to shade to move their stocks and the market tends to stagnate. Even at present prices, where a number of items look very cheap, buyers have little faith in the future as evinced by their attitude. Of course, with the present type of market, it is always possible for prices to slump even below the point where they stand to-day. Nevertheless, the opinion seems general that any buying will see an almost immediate response in prices.

Vegetable Oils

Castor Oil—Demand for small routine lots only reported. Prices unchanged at 14½c@15clb. No. 1 in bbls. Cases 1c higher. No. 3 oil at 14c.

Chinawood Oil—Although there are a few bullish factors in wood oil on spot, the market slumped again this week on limited demand. Prices for spot oil dropped to 24½c lb., for bbls. Tanks were reported offered spot N. Y. at 24c lb. Coast tanks, August or forward, went off to 22c. Stocks are not large, but demand has been at a standstill for some time.

Coconut Oil—Coconut oil continues weak. Stocks are heavy and as is the case with most of the vegetable oils, buying is negligible. Some slight shading has been noted under last week's figures probably induced by several inquiries in the market. Spot Ceylon oil in bbls. is held at 9½c lb., tanks 8¼c. Manila tanks, spot Coast, at 8c lb. For later July shipment, down to 7¾c was heard. Cochin oil or edible, bbls. spot N. Y., 10½c unchanged.

Corn Oil—Stocks at mills, although not large, are accumulating as a result of stagnated demand. Weakness in prices is reported. Crude tanks at mills 8¾c@9clb. Crude in bbls. N. Y. at 10½c lb. Refined is easier at 12½c@13clb. spot bbls.

Cottonseed Oil—Movement of oil has been at a standstill during the past week both for domestic use and export. Trading on the Produce Exchange has been sluggish. Bearish factors still predominate in the market, particularly after the interpretation placed on the recent Government cotton report which stated that acreage would be larger than expected. Prices for oil are unchanged at 11¼c lb. spot bbls. P.S.Y. at N. Y.; July-August 11c. Pressure on prices continues in evidence.

Linseed Oil—Although operations continue active at the moment owing to orders for July-August delivery of oil on contract, it is believed that the mills will shortly begin to slow down with an idea of suspending operations during August. The amount of future shipment business held by crushers is very small. Buyers have refused to contract ahead at the present time although they are reported taking all oil on old contracts. Prices generally are softer although no official cuts have been made. Spot raw oil in bbls.,carlots, is held at $1.05@$1.12gal. Five bbl. lots at $1.08@$1.15gal. July-August-Sept. shipment, cars, $1.03@$1.05gal. Duluth names spot seed at $2.55 bu. Winnipeg quoted $2.22 bu. July at Buenos Aires held at about $1.90 bu. Minneapolis July at $2.58. Crushers are still running on high cost seed.

Olive Oil—Small lots moving only. Spot denatured goods at $1.10 gal. bbls. Edible at $1.70@$2.00gal. Spot foots bbls. 7¾c.

Peanut Oil—Dull and without new developments during the week. Spot refined bbls. named at 16c@16½clb. Crude bbls. N. Y. 12c@13clb.

Soya Bean Oil—Little change from the weak position noted in the last report. Demand is quiet and prices are under pressure along with coconut. Crude oil in tanks on Coast at 9¼c lb. Spot tanks New York at same price. Crude in bbls. spot at 12c.

Animal Oils

Degras—Quiet and in small demand, but not in large supply here. American bbls. spot 3½c@4clb. English type 4½c lb.

Lard Oil—Dull with prices unchanged at 14½c lb. for edible. Winter pressed at 12c lb. No. 2 oil 10c lb.

Neatsfoot Oil—Twenty degree at 16¾c lb. unchanged; 30 deg. 15¼c@15½clb. Prime bbls. N. Y. 14¼c. Quiet and inactive.

Oleo Oil—Price stationary. Inquiry dull. No. 1 11¾c; No. 3 9c lb.

Red Oil—Spot N. Y. distilled or saponified bbls. at 9½c@10clb.

Stearic Acid—Prices unchanged although demand is quiet and competitive products tend downward. Triple pressed 14½c bags, works Double pressed, 13c; single pressed 12¾c lb.

Fish Oil

Cod Oil—Little change is noted except bearish re-

ports from Norway regarding quantity of cod oil going into industrial operations there. Spot Newfoundland oil bbls. 70c gal., domestic oil 68c gal. Demand is confined to small lots.

Menhaden Oil—The situation shows no basic changes. Demand is slow which is a factor preventing prices running up in the face of short production. Crude tanks f.o.b. Baltimore, 68c gal. Light strained unchanged at 80c gal.; yellow bleached at 82c gal.

Whale Oil—Natural winter whale oil quiet and unchanged at 75c gal. spot N. Y. bbls. Bleached winter, same position, 78c@30cgal.

Sperm Oil—Spot 38 deg. cold test bleached bbls. N. Y. at 99c gal.; 45 deg. 94c gal. F.o.b. New Bedford, 5c less.

The plant of Western Milling Co. in an east-bay suburb of Greater San Francisco has been leased to McCall Oil Co., and will be operated as a vegetable oil refinery. It will have capacity of 100 tons of cottonseed and 50 tons of flaxseed a day. The company will operate on cottonseed from October until April, inclusive, and the rest of the year on flaxseed. Officers are B. B. McCall, president; James McDonald, vice-president, and B. B. McCall Jr., secretary and treasurer.

U. S. exports of pigments, paints and varnishes rose from a valuation of $937,313 in April, 1922, to $1,373,801 in April, 1923. Expansions were made in foreign shipments of zinc oxide, bone black, carbon and lampblacks, red lead and litharge, and other chemical pigments, while slight reductions occurred in lithopone and white and sublimed lead.

A new resin, suitable for commercial purposes, has been discovered in Mexico and has been reported to the Department of Commerce. It is extracted from the "cuapinole" tree of the tropical zone of Mexico, and it of a quality suitable for the finest varnishes. One of the features of the resin is its insolubility in either alcohol or gasoline.

Statistics of vegetable oils and oil materials in international Commerce from 1913 to 1920, inclusive, have been issued by the Department of Commerce in Miscellaneous Series Bulletin No. 108. Production, imports and exports of all vegetable oil producing countries are listed.

Mamolith Carbon Paint Co., Cincinnati, has been acquired by J. H. Kresge, Pittsburgh, and associates, who plan for extensions to provide greater production. The company's mines in Arkansas are included in the purchase, and will be expanded. The consideration was $300,000.

Palmolive Co. has taken a ten-year lease on warehouse and office building to be erected for its requirements on Second street, San Francisco. The site has track privilege and the building will be used as distributing headquarters for this section of the Pacific Coast.

Production of peanuts in China in 1922 is estimated at 445,000 tons. Of this amount about 50 per cent is available for export either as peanuts or as peanut oil, according to the Department of Commerce reports.

Mississippi Cotton Oil Co.'s plant and property in ten localities in Mississippi, valued at about $500,000, has been sold to J. W. Tuberville of New York, G. W. Covington of Hazelhurst. Miss., and others.

Imports of linseed oil in April were 4,525,353 pounds, valued at $389,110. Exports were 236,914 pounds, valued at $32,181.

Trade Notes and Personals

Keene Chemical Co., Inc., has leased the store, basement and second floor of 83 Pine st., New York.

Secretary Hoover's book outlining the acts which trade associations may legally do will be issued July 16.

Creo-Dipt Co.'s plant, St. Paul, Minn., was recently damaged by fire. Loss was covered by insurance of $66,000.

Dr. F. G. Banting, discoverer of insulin, has been granted an annuity of $7,500 for life by the Canadian Government.

H. A. Forbes, of Potash Importing Corp. of America, New York, recently returned from a trip through the South and West.

W. Benkert, of W. Benkert & Co., crude drug importers, New York, sailed on the Ryndam, June 30, for an extended trip through the drug producing countries of Europe.

S. B. Penick, of S. B. Penick & Co., crude drugs, New York, has recently returned from a trip through the southern collection districts. Mr. Penick reports that collection of crude drugs is moving slowly.

Theodore C. Schaetzle, formerly chief chemist of the Baltimore sewage disposal plant, has been appointed chemical engineer for the Maryland State Department of Health. Mr. Schaetzle will act as adviser to communities which contemplate installing water and sewerage systems.

C. A. Stedman has been assigned to the Eastern sales department of New Jersey Zinc Co., handling the company's products in New Jersey, Philadelphia, Baltimore, and Washington territory. C. F. Beatty becomes advertising manager. E. V. Peters is general sales manager, and F. C. Fuller in charge of Eastern sales.

Ivan R. McHaffie, B.A., M. Sc., University of Manitoba, who has been carrying on chemical research work for three years, including an investigation of the disintegration of cast iron by soils, has been awarded one of the three scholarships given to Canadian students by the Royal Commissioners of the Exhibition of 1851.

Commodore Isaac E. Emerson, of Emerson Drug Co., Baltimore, and associates, have organized a new trust company under the name of Emerson Trust Co. The institution will have quarters in the basement of the National Bank of Baltimore. John C. Muth, of Muth Bros. & Co., wholesale druggists, is a member of the board of directors.

Dale S. Chamberlain, professor of industrial chemistry, Lehigh University, has sailed for England for a year's study of industrial fuels, in order to bring to the course on fuels at Lehigh the benefits of intimate contact with the latest European developments. Prof. Chamberlain will represent Lehigh University at the meeting of the research branch of the Institute of Pure and Applied Science.

Depositions in connection with the suit for $2,500,000 damages, brought by Alexander Milburn Co., Baltimore, manufacturer of acetylene and acetylene appliances, against Union Carbide and Carbon Co., New York, in the United States Court at Baltimore last year, were taken before Harry L. Kellogg, United States Commissioner, at Milwaukee on July 2. Milburn Co. asserts that Federal employees were induced by improper means to make reports unfavorable to the apparatus of the Milburn Co.

The Fine Chemical Market

Current Spot Quotations of Fine Chemicals, page 102

LOWER TREND IN FINE CHEMICALS

Especially in Tartaric Acid, Amidopyrine, Antipyrine, Cream Tartar, Formaldehyde, and Mercury—Alcohol in Active Demand—Menthol Inside at $10lb. Spot—Dullness Prevails

PRICE CHANGES IN NEW YORK
(Stocks in First Hands)

Advanced
No Advances
Declined

Acid, Citric, Imp., ½c lb.
Acid, Tartaric, Imp., ½c lb.
Amidopyrine, 25c lb.
Camphor, Jap., 1c lb.
Glycerin, C.P., ½c lb.
Mercury, $1.50 flask

Trend of the Market

	Today	Last Week	Last Month	Last Year	War Peak	Pre-War
Acetanilid	$.32	$.32	$.32	$.30	$2.00	$.20
Acid Citric, Import	.51½	.52	.52	.44½	1.25	.45
Caffeine Alkaloid	3.75	3.75	3.75	3.75	18.00	3.65
Calomel, American	1.25	1.25	1.25	.94	3.43	.90
Camphor, Jap., ref.	.87	.88	.88	.80	3.55	.41
Iodine, Resublimed	4.55	4.55	4.55	4.20	5.00	3.75
Menthol	10.00	10.00	8.50	6.25	13.50	3.00
Potassium Bromide, Cryst.	.26	.26	.26	.23	4.30	.80
Quinine Sulfate, Imp.	.50	.50	.50	.50	.90	.25
Sodium Salicylate	.47	.47	.47	.32	4.25	.27
Strychnine Sulfate	.84	.84	.84	.76	2.05	.50
Average	**2.39**	**2.39**	**2.26**	**1.68**	**5.92**	**1.56**

The tendency for prices to move downward where there was any movement at all, characterized the medicinal chemical situation during the past week. Basically, the market is still firm due to the generally high import and manufacturing costs, and also owing to the small stocks carried on spot. This condition is especially true in regard to imported bromides and menthol. One house said that the market was in a healthy condition in spite of the limited demand. The trade would not be surprised if there was another advance in alcohol due to the good demand and the increasing cost of raw materials. Simultaneously with the weakening of inquiries, stocks have begun to be absorbed by second hands, and are being offered considerably below makers' prices. Stocks of citric acid appear to be ample to meet present needs. Amidopyrine has been cut again. Formaldehyde demand is at standstill. Mercury easy on spot.

Acetanilid—All makers are now agreed at 32c@33clb. spot. Demand routine.

Acid, Acetylsalicylic—Owing to off season, makers have reduced prices in order to increase sales. Quoted at 85c@90clb. spot as to maker. Resales generally quoted at 83c lb. spot.

Acid, Citric—The warm weather has not been of sufficient length to absorb all available stocks. Market is potentially strong though demand at the moment is not equal to 52c lb. spot for imported as there are lots here and there at 51½c lb., while shipment is substantially above this figure. Imported quoted at 51½c@52clb. spot and domestic at 49c lb. spot with business confined mostly to regular customers. Last week saw 175 cases of citrate magnesia entered at New York.

Acid, Diethylbarbituric—Imported quoted at $4.25 lb. spot. No change in present duty is looked for until the President returns from his trip to the North-west.

Acid, Salicylic—The 50c maker has now reduced his price to 45c lb., making the spot quotation 40c@45clb. according to manufacturer. Makers generally want to pass up the inquiries for big lots and instead take on small, though numerous, orders in spite of the easier position as well as more plentiful stocks of phenol. They appear to be unwilling to gamble on the future. Big lots of resale goods are being offered at 40c lb. spot probably due to heretofore close holders wanting to realize on holdings before market becomes unsteady.

Acid, Tartaric—Imported has eased off and now quoted at 35c@36clb. spot. Shipment is still firm although on spot demand appears to be quiet. The trend in this item is to lower levels, providing buying does not suddenly take a spurt. During past week 120 kegs and 190 barrels were imported at New York. Domestic quiet at 37¼c lb. spot.

Alcohol—One house predicted that within three weeks there would be another general advance owing to slight increase in cost of raw materials, but more to active demand for this item. Completely denatured No. 1 quoted at 41c@43cgal. spot in drums, and special denatured No. 1, 38c@40cgal. spot in drums.

Amidopyrine—Has declined and now quoted at $5.00 @$5.50lb. spot as to holder owing to makers desire to give buyers advantage of cheaper raw materials.

Antipyrine—Generally quoted at $3.00@$3.25lb. spot with some outside holders offering at $2.80@$2.90lb. spot for 100lb. cases. Market is firm due to strength abroad.

Bromides—Imported spot market is easy in spite of absence of recent importations. Last week 146 cases of potassium salt were entered at New York, which was the first arrival in this market for some time past. Imported ammonium, potassium, and sodium quoted at 18c, 19c, and 20c lb. spot, respectively. Domestic unchanged at 33c for ammonium, 26c for potassium, and 25clb. spot for sodium.

Camphor—Japanese 2½lb. slabs can be obtained at 87c@88clb. spot as to quantity. Last week saw 300 cases from China imported at New York. American unchanged at 96c lb. spot for barrels.

Cod Liver Oil—While catch thus far this year is in excess of last, considerable quantities are going into industrial uses. Just how much has been used for this purpose is a matter of speculation. However, a number of sources indicate that the usual amount is being refined for medicinal use. Spot quoted at $25@$26bbl., and shipment at $23.50 bbl. c.i.f. New York. On June 27 forty casks were entered at Philadelphia.

Cream Tartar—Market dull at 25c lb. spot for imported, and 26½c lb. spot for domestic with shipment lower due to better supplies at source.

Formaldehyde—Demand has eased off to such an extent as to be at a standstill. Makers naming 14½c lb. for c/l at works with possibility to shade these figures.

Glycerin—C. P. named easy at 16c lb. for spot drums, and dynamite at 14½c lb. spot for drums. The West is offering at prices slightly lower.

Menthol—Rumors are heard that the "bear crowd" have sold short, and that they are in the market to cover up. If this be the case then the market is in for further advances. Additional reports are heard that operators on the "bull side" have sold out several times in order to give the impression of an artificial scarcity. Some

houses think that big buyers will be in market within the next two weeks. Last week saw 105 cases imported at New York. Spot quoted firm at $10.00 lb. for cases and $10.25@$10.50lb. for less.

Mercury—Has eased off on spot and now quoted at $66@$67 flask with tendency to firm up on an appreciable amount of buying, as replacement costs are above this market. Last week 337 flasks were imported at New York.

Podophyllin—Quoted firm at $5.00@$5.25lb. spot with spot small resale lot available at $4.75 lb. spot.

Potassium Permanganate—Generally quoted at 17c@18½clb. spot as to seller. Cheap lots of 16½c material are off the market. However there is one small lot at 16⅝c lb. spot. The tendency is for weak holders to get rid of stocks even at a sacrifice.

Thymol—Market has eased off and now quoted at $3.00@$3.25lb. spot for 100 lb. lots owing to keen competition.

OUTPUT OF COAL-TAR CHEMICALS GROWS

In 1922 the Production of Medicinals Was Double the Record for 1921

The coal-tar dye and chemical industry has expended over $21,000,000 during the last five years, 1917-1922, says the U. S. Tariff Commission in the "Census of Dye and Other Synthetic Organic Chemicals," just issued. In probably no other field have there been such extensive investigations as in the manufacture of dyes. The accomplishments of that period and the progress and development of the dye industry may be attributed in no small part to the enormous expenditures in research. New dyes and other chemicals of great economic value have been developed and the costs of production have been reduced, as is revealed in the conspicuous reduction in the prices of dyes.

There was a large increase in the production of tricresyl phosphate, which is used as a substitute for camphor in the manufacture of pyroxylin plastics. Although these products are not used to replace camphor for all purposes in this industry, their future development by the coal-tar industry will overcome, at least to some extent, the monopoly on camphor which Japan has held in the past.

Photographic Chemicals—The production by seven firms of those coal-tar products used as photographic developers totaled in 1922, 345,798 pounds, compared with 188,798 pounds in 1921.

Medicinals Show Large Increase—This class of coal-tar products may be considered one of the most important as they are essential to the nation's welfare. The total production of synthetic medicinals of coal-tar origin for 1922 was 2,946,347 pounds, compared with 1,545,917 pounds in 1921.

Conspicuous progress has been made within the past few years in the development and manufacture of synthetic organic chemicals of non-coal-tar origin. This includes acids, alcohols, esters, ketones, aldehydes, etc., which are used as medicinals, solvents, perfumes, flavors and in many industrial and other processes. This field holds high promise of further expansion, and it is expected that many new products of great economic value will be manufactured and placed on the market. The production of synthetic organic chemicals, other than those derived from coal tar, during 1922 was 79,202,155 pounds; the production in 1921 totaled 21,545,186 pounds.

Carl Vietor, of Vietor & Hosken, pharmaceuticals, New York, returned recently from a trip through the Orient.

C. A. BROWNE HEADS CHEMISTRY BUREAU

(Special to DRUG & CHEMICAL MARKETS*)*

Washington, D. C., July 11.—Dr. Charles A. Browne, of New York, has been appointed head of the Bureau of Chemistry, United States Department of Agriculture, by Secretary Wallace. Dr. Browne is at present chemist in charge of the New York Sugar Trade Laboratory, Inc., and will not take up his new duties until Fall. Dr. Browne was formerly with the Bureau of Chemistry, resigning in 1907 to accept the position with the New York Sugar Trade Laboratory.

Dr. Browne is an agricultural chemist of wide experience and has done notable work in this field. He is an associate editor of the "Journal of the American Chemical Society" and is the author of many bulletins, papers, and text books on chemical subjects. Dr. Browne is a native of North Adams, Massachusetts, where he was born in 1870. After taking his M. A. degree at Williams he studied at the University of Gottingen, Germany.

The office of chief of the Bureau of Chemistry has been vacant since the resignation of Dr. Carl L. Alsberg, July 15, 1921. Walter G. Campbell, who was assistant chief of the bureau and in charge of the enforcement of the Federal Food and Drugs Act, has been acting chief of the bureau. The law requires that the chief of the bureau be a chemist.

B. P. Steele has been made salesmanager for W. F. George Chemicals, Inc., New York, alkali and chemical distributors. Mr. Steele is well-known in chemical sales circles of the Metropolitan district through several years connection with W. F. George. The appointment of Mr. Steele as salesmanager marks another step in the expansion of the George organization.

American fertilizer manufacturers have signed a contract with German Potash Syndicate. Owing to the low prices offered by the Germans, the contract is expected to have an important bearing upon rates made by Alsatian Potash Society. The prices in the new German contract are the lowest since the war and below pre-war levels.

German, Swiss, and French dye manufacturers have reached an agreement whereby the Swiss and French are to have the use of dye patents belonging to the Interessen Gemeinschaft. Compagnie Nationale is the French concern, and Durand & Huguenin is the Swiss company.

Phosphoric acid unit of American Cyanamid Co.'s plant at Brewster, Fla., was destroyed by fire recently, with estimated loss of $400,000 to $500,000. The plant was used for experimental purposes for the production of pure phosphoric acid from pebble phosphate.

Dr. C. F. Chandler, New York, Sir Dorabji Tata, India, Professor Paul Kestner, Holland, Professor Sakurai, Japan, and Prince Genori Conti, Italy, were recently elected honorary members of the British Society of Chemical Industry.

The French Government will offer at public auction in Paris, on July 20, the dye plant established by Weller-ter-Meer, German manufacturers, at Turcoing, before the war. The plant was sequestered by the French in 1916.

Carbon tetrachloride is the subject of a single page circular which has been sent out to the trade by the Roessler & Hasslacher Chemical Co.

German potash prices have been advanced twice, recently, on June 25 by 50 per cent, and July 2 by an increase of 9.7 per cent.

The Crude Drug Market

Current Spot Quotations of Crude Drugs, page 117

CASCARA SAGRADA ADVANCED ON SPOT

Practically No 1921 or 1922 Peel Available—New Crop Roman Chamomiles Predicted at 40c lb.—1717 Bags Cloves Imported—Dandelion Shipment Equal to Spot—Gentian Root Firm—Spanish Saffron Easier

PRICE CHANGES IN NEW YORK
(Stocks in First Hands)

Advanced

Althea Root, Cut, 8c lb.
Cascara Sagrada, 1c lb.
Cloves, Zanzibar, ½c lb.
Ergot, 1c lb.

Declined

Anise Seed, Star, 1½c lb.
Arabic Gum, Amber Sorts, ½c lb.
Cantharides, Chinese, 8c lb.
Russian, 5c lb.
Caraway Seed, Dutch, 4c lb.
Elder Flowers, 1c lb.
Japan Wax, 1¼c lb.
Mandrake Root, 1c lb.
Saffron Flrs., Spanish, $2.50 lb.
Senna, Alex., Siftings, 1c lb.

Trend of the Market

	Today	Last Week	Last Month	Last Year	War Peak	Pre-War
Aconite Root, U.S.P.....	$.38	$.38	$.38	$.21	$.90	$.12
Buchu Leaves, Short.....	.90	.95	.95	1.10	4.00	.85
Cantharides, Russian	1.75	1.75	1.75	5.00	9.00	2.10
Cocculus Indicus	.03½	.03½	.03½	.04½	.85	.03
Ergot, Spanish	.52	.51	.52	1.05	4.50	.54
Insect Powder, pure.....	.60	.60	.67	.52	1.00	.28
Ipecac, Cartagena, powd...	1.90	1.90	1.90	1.90	4.50	1.35
Nux Vomica	.06½	.06½	.06½	.06	.14½	.07
Opium, gum	8.00	8.00	8.00	6.00	30.00	5.00
Rhubarb Root, H. D.....	.43	.43	.43	.55	1.75	.15
Tragacanth, No. 1, ribbon..	1.50	1.52	1.52	1.75	6.00	1.50
Wild Cherry Bk., thin nat.	.10½	.10½	.10	.09	.21	.07
Average	**1.35**	**1.35**	**1.36**	**1.52**	**5.28**	**1.00**

Business in botanical drugs last week was mostly of the hand to mouth variety with round lot inquiries the exception. Reports come from the country that offerings are being made in restricted quantities, and that some items are being disregarded altogether. As usual, attention appears to be paid only to the more expensive drugs. This same condition is also reflected in the drug producing countries of the Old World. Strength is shown on spot owing to the unusually small stocks carried and the general high replacement costs. If buyers could foresee their actual needs, the trade is of the opinion that now would be the opportune time to stock up. Importers are well aware that costs to carry stocks on spot are higher than in the country, therefore, competition is very keen, and will be as long as there is any profit left in the transaction. But when cutting by weak holders gets below replacement prices, it discourages further importations, and thereby makes the buyer eventually pay higher prices when he really needs goods in a big way. The present situation is tending toward an unstable market providing a halt is not called.

Aconite Root—Quoted at 38c@40clb. with some houses asking 40c lb. as inside.

Agar Agar—Spot at $1.45 lb. for No. 1 and $1.30 lb. for No. 3 is expected to firm up because of higher shipment costs. Supplies are not generally considered heavy. Recent cables from London indicate a higher market there. During past week 120 bales were entered at New York.

Aletris Root—Quoted at 49c@51clb. spot.

Aloes—Barbadoes unchanged at 65c@70clb. spot. Cape generally quoted at 9c@10clb. spot with one firm asking 12c lb. inside. Curacao quiet at 8c@8½clb. spot. Last week saw 125 cases of Curacao entered at New York.

Althea Root—Cheap lots have disappeared from market, and for best quality 40c lb. spot is asked with some houses offering poor qualities at 28c lb.

Anise Seed—Star has declined and now quoted at 12½c@13clb. spot. Demand is small at the moment. While spot Spanish is holding at 26c@27½clb., shipment is quoted easier at 25½c@26½clb.

Arabic Gum—Amber sorts quoted lower at 14c@14½c lb. spot owing to selling pressure to dispose of distressed lots that are hanging heavy on market.

Balsams—All grades at the moment are holding firm. Canadian Fir quoted at $13.00@$14.00gal. spot. Oregon Fir at $3.25@$3.40gal. with arrivals named at same price. Peru unchanged at $1.75@$1.80lb. spot. Tolu is not being offered in any sized quantities. The trade thinks in short time this item will be off the market. Quoted at $1.25@$1.35lb. spot if procurable.

Buchu Leaves—Spot prices are easy at 90c@$1.00lb. for bales with some factors holding to 95c lb. as inside. This item has been going up and down with considerable regularity, and always keeping only slightly above replacement. London cables state firmer market.

Cantharides—Both Chinese and Russian quoted easier at $1.18 lb. and $1.85 lb. spot for powdered, respectively.

Caraway Seed—Dutch has declined and now quoted at 21c@21½clb. spot due to better supplies coming out of Holland.

Cascara Sagrada—Little of 1921 and 1922 bark is to be found on spot, and best inside price is 15c lb. spot for 1920 peel. Some houses have withdrawn all offerings until more can be learned as to spot holdings and future shipments.

Chamomile Flowers—Stocks of Roman have dropped until only about 50 pounds are available at $2.00 lb. spot. High prices of past year have induced larger acreage to be grown and some directions in trade predict 40c lb. flowers this coming year. Hungarian easy at 13c@13½clb. spot with possibility of shading these prices with firm offer.

Cloves—Zanzibar has advanced and now quoted at 30½c@31clb. spot with tendency for much higher figures owing to short crop and inferior quality. Although during past week 1717 bags were entered at New York, it is thought that most of these are "sold to arrive." Cables from London indicate higher market.

Cohosh Root—Black quoted firm at 9c@9½clb. spot with limited quantities at 8½c lb. Blue also firm at 18c@19clb. spot with poorer quality at 12c lb. spot.

Dandelion Root—Spot quoted firm at 15c@16clb. with little material coming out of primary markets as orders have been placed and at the moment no possibility exists to fill them.

Elder Flowers—Quoted lower at 18c@19clb. spot.

Ergot—Has stiffened up somewhat and for best quality 52c@55clb. spot is named.

Gentian Root—Firm at 8¾c@9clb. spot with restricted supply at 8½c lb.

Golden Seal Root—Named at $3.50@$3.55lb. spot for whole and $3.75@$3.85lb. spot for powdered. Demand active.

Insect Powder—Quoted easy at 60c lb. spot up to 64c as to seller. Demand light.

Japan Wax—Has declined and now quoted at 15¾c @16clb. spot owing to keen competition.

Licorice Root—Russian whole quoted at 7¼c@8clb. spot. On June 27 16,377 bales were entered at Philadelphia from Batoum.

Mandrake Root—Spot has declined and now quoted at 17c@18clb. in spite of firm price in country.

Saffron Flowers—Spanish is quoted lower at $38@ $39lb. spot. High prices of last year have caused considerable interest in growing this item.

Sarsaparilla Root—Mexican quoted firm at 32c@33clb. spot. During past week 49 bales were imported at New York.

Senega Root—Quoted at 64c@65clb. spot with tendency to become easy. Reports are heard that considerable high priced material is still on spot. The usual good export demand has not materialized this year.

Worm Seed—American slightly off at 9c@10clb. spot. Levant quoted firm at $3.50@$3.75lb. spot.

A firm doing considerable business with the Government, supplying Federal prisons with chemicals and drugs, received a letter from a prison pharmacist, recently, requesting a "loan" in order to apply for a writ to prevent his removal to another prison. The prisoner did not say that he would buy from the firm all the chemicals and drugs which might be wanted at the penitentiary, in the future, but the inference was plain that unless he had $50 or $100 immediately he might be transferred and the new pharmacist might decide to purchase the supplies elsewhere.

Exports of quinine sulfate and other cinchona salts during the first quarter of 1923 were 193,968 ounces ($65,-720), compared with 216,667 ounces ($138,422) in 1922; antitoxins, serums, and vaccines, $96,401, compared with $74,183 in 1922; all other medicinal and pharmaceutical preparations, 8,982,658 pounds ($4,066,311), compared with 7,681,059 pounds ($3,303,363) in 1922; formaldehyde, 410,378 pounds ($67,545), compared with 618,079 pounds $72,250) in 1922; glycerin, 281,963 pounds ($510,855) compared with 1,164,733 pounds ($454,185) in 1922; and wood and denatured alcohol, 514,147 gallons ($462,808), compared with 285,000 gallons ($201,036) in 1922.

Dr. W. W. Peter, member of Council on Health Education, Shanghai, China, says: "Thirty-five per cent of the total revenue of the Government of Siam comes from opium. Siam opium is a very strictly guarded Government monopoly, and one of the sights of Bangkok which all visitors are not permitted to see is the carefully policed, well organized and extensive opium factory."

Dirteneme Chemical Co., Inc., Frederick, Md., incorporated for $10,000, will conduct a general chemical and mail order business. The incorporators are M. Roy Sharrer, Mary B. Burras and Clarence M. Albaugh.

J. S. Young Co.'s wharf at foot of Lakewood ave.. Baltimore, Md., was partly destroyed by fire, recently, with loss estimated at $50,000, which was covered by isurance. A quantity of licorice was damaged.

Scott's Preparations, incorporated under the laws of Delaware, has designated H. Z. Pokress, 251 W. 19th st., as New York representative.

Southern Cotton Oil Co., Savannah, Ga., will build an extension to its local plant to cost about $70,000.

J. E. BARTLETT HEADS PITMAN-MOORE

A controlling interest in the Pitman-Moore Co., Indianapolis, Ind. manufacturers of pharmaceutical and biological supplies, has been bought by James E. Bartlett, of Detroit. Mr. Bartlett, formerly president of Parke, Davis & Co., Detroit, has taken over the executive management of the company.

Mr. Bartlett succeeded Frank G. Ryan as president of Parke, Davis & Co., in June, 1920. He was previously director of sales. He started with the company as a traveling salesman in 1889. Feeling the need of special training he entered the Philadelphia College of Pharmacy, and after graduation spent several years in the laboratory department of Parke, Davis & Co. Promotions followed rapidly. When the company opened a Chicago office in 1896, Mr. Bartlett was chosen to initiate the movement. He returned to Detroit in 1913 and took charge of the selling department. In seven years he became president. In November, 1921 he became manager of the New York office, but resigned soon afterward.

Pitman-Moore Co. is one of the largest manufacturers of hog cholera serum in the world. When H. C. Moore died, his wife became president of the company.

MEYER BROS. FIRE LOSS $250,000

Buildings of Meyer Bros. Drug Co., St. Louis, were damaged by fire, on June 22, to the extent of about $250,000. The loss was covered by insurance. The stock in the four upper floors of Building D, which were occupied by the drug company as a storage warehouse for drugs and sundry supplies, was valued at from $150,000 to $200,000, and this stock probably will be a total loss. The damage to the building proper probably will reach $50,000.

In addition, the stock of the American Glue Co., which occupies the first and second floors of the building, was badly damaged. This stock was valued at $25,000.

Louis K. Liggett Co., subsidiary of United Drug Co., has called for redemption the 500 shares, $100 par, 6 per cent preferred and has issued 10,000 shares of 7 per cent cumulative first preferred, $100 par. There are also outstanding 98,500 shares of $100 par common.

Chin Chin Chemical Co., Chicago, a reorganization of National Chemical Co., will build a new plant at Ingleside avenues and 138th street. The structure will be two stories and, with machinery, is estimated to cost $350,-000. Joseph T. Hutton is president.

Chemical Warfare Service and the Bureau of Chemistry, Department of Agriculture, will have exhibits at the Chemical Exposition this fall. Chemicals of the kitchen and the chemistry of food will also be features of the show.

Coconut oil, tallow, paraffin, and stearic acid are being imported into Mexico in large quantities for use in the hundred soap and candle factories.

The Essential Oil Market

Current Spot Quotations of Essential Oils, page 119, Aromatic Chemicals, page 120

ORANGE AND CLOVES ADVANCE FURTHER

Owing to Scarcity and Higher Spice, Respectively—Adulterated Ceylon Citronella En Route—Large Import of Oil Cassia—Caraway Seed Reported Bought by Speculators—Keen Competition in Diethyl Phthalate

PRICE CHANGES IN NEW YORK
(Stocks in First Hands)

Advanced

Oil Cloves, 15c lb.
Oil Orange, Italian, 10c lb.
Oil Petit Grain, S. Am., 10c lb.
Geraniol, Imp., 50c lb.
Amyl Formate, 50c lb.
Anisic Aldehyde, 25c lb.

Declined

Oil Caraway, 25c lb.
Oil Coriander, 75c lb.
Oil Dill, 50c lb.
Oil Hemlock, 5c lb.
Diethyl Phthalate, 10c lb.

Trend of the Market

	Today	Last Week	Last Month	Last Year	War Peak	Pre-War
Oil Bergamot	$2.60	$2.60	$2.60	$3.90	$7.00	$5.00
Oil Citronella, Ceylon	.70	.70	.70	.55	.92	.60
Oil Cloves	2.10	1.95	1.85	1.95	3.70	1.40
Oil Lemon Italian	.80	.80	.77	.65	1.70	2.00
Oil Peppermint, Nat	2.65	2.65	2.65	2.00	9.00	8.25
Oil Sandalwood, E. I	7.70	7.70	7.75	7.10	13.00	5.25
Oil Sassafras, Artif.	.45	.45	.45	.45	1.00	.26
Benzaldehyde, U.S.P.	1.50	1.50	1.50	1.40	5.15	1.50
Coumarin	4.50	4.50	4.50	3.00	31.00	3.10
Methyl Salicylate, Cans	.57	.57	.57	.35	1.00	.90
Vanillin	.41	.41	.41	.50	.95	.29
Average	2.18	2.17	2.15	1.99	6.83	2.05

The general aspect of the essential oil situation shows little variation. However, those items that were firm last week, are now firmer. A few more scarcities are appearing on spot. The total volume of business transacted during the current week was generally reported to be less than the week previous. The market as a whole appears to be holding up well with no great number of sharp breaks that might cause a general dumping of stocks. Shading, although not quite so pronounced as some time ago, still tends to make two prices on some items, one an open price and the other an inside price. Oil cassia is quoted firmer for shipment. Oil cloves is higher. Oil citronella, Ceylon, ranges from 65c to 70c lb. c.i.f. for shipment, as to seller. Oil orange, Italian, is scarce on spot. Another aromatic chemical, anisic aldehyde, has been changed from 45 per cent duty to 60 per cent plus seven cents pound.

Essential Oils

Oil Amber—In light demand at 90c@$1.00lb. spot for rectified.

Oil Anise—Supplies are coming forward in fair quantities at 52½c@55clb. spot for U.S.P. with some houses holding at maximum as inside. Last week saw 25 drums entered at New York.

Oil Bergamot—Market quiet at $2.60@$2.70lb. spot for coppers with shipment quoted higher. Some directions on spot are wrongly associating this item as being in close proximity to the recent eruption. During past week 3 cases were imported at New York.

Bois de Rose—Quoted firm and in small supply at $2.50@$2.65lb. spot as to seller.

Oil Camphor—Japanese white unchanged at 13c@15clb. in drums. Exports from Japan during March were 2,069 piculs, valued at 50,500 yen. During three months ending March 31, 4,140 piculs, valued at 90,397 yen, were exported in 1923, against 2,502 piculs, valued at 62,922 yen in 1922. Last week saw 26 drums entered at New York from Shanghai.

Oil Caraway—Cheaper lots can be obtained at $7.00@$7.50lb. as to seller and quantity. Speculators are reported to have bought up new crop of seed in spite of the general knowledge that this year's harvest will be larger than last.

Oil Cassia—Spot stocks of redistilled are scarce at $3.00@$3.10lb. with shipment quoted much higher. For some time past little has been offered from primary market. Within the past few days several offerings have come forward, but the trade thinks the price is too high at the moment. Sales have been made recently in London at 11s 6d. During past week 150 cases were imported at New York.

Oil Cedar Leaf—Stocks are in good supply and firm at $1.00@$1.20lb. spot.

Oil Citronella—Reports are heard of adulteration of Ceylon with mineral oil and alcohol or acetone to the extent of about 20 per cent. This special lot was sold as passing Schimmel's test, but was later detected when oil was further tested. If this is to be a common practice among shippers, it is thought in trade that a more severe test should be specified in order to detect any foreign oil. This doping of the oil was evidently done abroad or en route as samples were extracted while oil was on dock. Ceylon quoted on spot at 70c@71clb. for drums, and shipment at 65c@75clb. as to seller. Imports have been light recently, thereby, causing sellers here to hold firm at market. Java unchanged at 85c@87½clb. spot as to quantity.

Oil Cloves—Has advanced again and now quoted at $2.10@$2.35lb. spot for cans as to seller with possibility of higher prices owing to steady advance of spice position.

Oil Dill—Has declined and now quoted at $4.25@$5.00lb. spot as to quality.

Oil Eucalyptus—U.S.P. quoted in good supply at 47½c@50clb. spot. During past week 11 drums were entered at New York.

Oil Geranium—Bourbon quoted firm at $6.75@$7.00lb. spot with offerings from primary market quoted at 225 francs per kilo. African quoted at $8.00@$8.50lb. spot.

Oil Lemon—Italian quoted slightly easier at 80c@90clb. spot as to seller, with some houses quoting less on large quantities. Demand at the moment appears to be quiet. A lot of 112 cases was imported at New York last week. American quoted at 75c@80clb. spot.

Oil Limes—Distilled quoted firm at 80c@90clb. spot as to seller and quantity.

Oil Orange—Bitter unchanged at $2.75@$3.00lb. spot. Sweet West Indian quoted firm at $2.75@$3.00lb. spot with some firms asking $2.85lb. as inside. Italian has advanced again and now quoted at $4.00@$4.50lb. spot according to seller with tendency to become scarce. One buyer was in market for 5 cases but could only locate 1 case at the moment. During past week 157 cases of West Indian were entered at New York as well as 32 cases of Italian. American unchanged at recent advance, $3.30@$3.40lb. spot.

Oil Peppermint—The usual reports of unfavorable weather conditions, shortage of labor, and high cost of collections have reached the spot market. Quoted

easy at $2.65@$2.80lb. spot for natural, and $2.90@$3.05lb. for redistilled.

Oil Wormseed—Quoted firm on spot at $7.25@$7.50lb. with tendency for some sellers to hold for $8.00lb.

Aromatic Chemicals

Amyl Formate—Has advanced in sympathy with scarcity of fusel oil and now quoted at $3.00@$3.25lb. spot.

Anisic Aldehyde—Quoted firm at $3.75@$4.50lb. spot as to holder and quality. Duty on this item like heliotropin has been changed from 45 per cent to 60 per cent plus 7 cents per pound.

Coumarin—Unchanged and in fair demand at $4.50@$4.75lb. spot. Resales quoted at $4.35lb. spot. London market has advanced and now quoted at 17s 6d per pound.

Diethyl Phthalate—Has declined and now quoted at 55c@60clb. spot owing to keen competition with possibility of shading this figure.

Methyl Salicylate—Unchanged at 55c@60clb. spot for drums and 57c@62clb. for cases as to seller.

Phenylacetaldehyde—Imported is extremely scarce on spot and for best quality $12.50lb. up is asked. Domestic quoted in good supply at $9.00@$11.00lb. spot.

ANISIC ALDEHYDE DUTY CHANGED

Anisic aldehyde has been changed from Paragraph 61, which provides a 45 per centum ad valorem duty, to Paragraph 28, which declares 60 per cent plus 7 cents per pound duty based on American selling price for a period of two years from date of present tariff. This article like heliotropin is claimed to be manufactured from a coal tar base. Importers contend that while it may be made on a small scale from coal tar, nevertheless, in a big way it is manufactured from a natural product, anethol, which is obtained from star anise seed. With the increased protection to the domestic makers, it is thought in the trade, that competition in the manufacture of this product will be keen.

While the range of prices is $3.75@$4.50lb. spot, the trade is of the opinion that the imported stocks will gradually get less and less as the laid down price in New York will not be low enough to warrant a reasonable profit after paying the increased duty. Some importers think that it will be only a question of time when all the aromatic chemicals which can be made both from natural and coal tar products, will be taken from the 45 per cent paragraph and placed in the 60 per cent paragraph.

Berry Brothers, Inc., Detroit, manufacturer of oils, will erect a four-story plant addition, to be equipped as a color pulverizing and grinding department. Property adjoining the works has been acquired, and three buildings now occupying the site will be razed to make room for the proposed addition. Frederick L. Colby is president.

Pennsylvania Soap Co., Lancaster, Pa., has purchased 30 acres of land near Delray, Fla., to grow coconuts to use in soap manufacture. About 15,000 trees are now being planted, as the first unit of a grove of 120,000 trees.

The production of synthetic phenolic resins, used in the manufacture of varnishes, lacquers, and electric insulators, was 5,944,133 pounds. Five companies are engaged in this industry.

Dewey & Almy Chemical Co., Cambridge, Mass., is building a one-story addition.

GERANIUM PRICES TO REMAIN HIGH

Under the head of "Geranium Probabilities," Ungerer's Bulletin says: "The demand for oil geranium African has been sufficiently large to exhaust stocks remaining from the old crop and for some time producers have had no spot goods to offer. Distillation of this year's crop began in May and will be completed early in July when the oil will be available for shipment from Algeria.

"No exact estimate of the yield is possible as yet, of course, but prospects have been consistently favorable and well informed sources predict a production somewhere between 15,000 and 20,000 kilos. Even in the face of the favorable crop there is little hope for lowered prices as the bulk of the production is already under contract and no tendency to shade quotations on the balance has been in evidence. The market undoubtedly acquires strength from the proportionately high prices maintained for the Bourbon oil and from the rather insignificant production of oil geranium in the Grasse region. Offers for large amounts of geranium African at a price below the prevailing market have aroused no interest on the part of producers or of the syndicate which still is firmly in control of the situation.

"Oil geranium Bourbon continues firm though the market is quiet. Distillers seem able to keep the price at the present level or near it though buyers regard the quotations as somewhat unreasonable. Predictions as to the future course of this oil are difficult on account of the existing deadlock which may be broken in either direction."

OIL ROSEMARY IS SCARCE IN MALAGA

(*Special Correspondence to* DRUG & CHEMICAL MARKETS)

Malaga, Spain, July 1—A large order for oil rosemary for prompt shipment has depleted the small stocks on hand, and the quantity distilled from new crop was insufficient to meet the demand. Prices have advanced 20 per cent. The herb gatherers have demanded higher prices for collecting this year, and it is difficult to obtain supplies.

Lavender spike oil business with the United Kingdom has been exceptionally brisk and very little oil is now left over from last crop. The new crop will come in September, and the yield promises to be satisfactory.

Thyme Oil—Exceptionally heavy rainfalls this season make the outlook for the crop uncertain at present. Quick growth, as the result of too much rain, may cause the plants to wither. Abundance of sunshine and slow growth are required for their proper development and yield in oil. This is a particularly interesting line, as a very large quantity of oil could be distilled if ordered in due time, but an extremely extensive organization is required for the purpose, involving considerable risk for the producer. Thyme oil containing crystallisable thymol is now ready for shipment, the price for oil of about 40 per cent thymol being approximately 17 pesetas per kilo.

The total production of flavors of twenty firms for 1922 was 1,215,668 pounds and the total output of seventeen firms making perfumes for 1922 was 793,148 pounds compared with 119,335 pounds.

Ambergris, said to be valued at £3,500, was included in the cargo of the steamship "Lime Branch," which sailed recently from Punta Arenas, Chile, for Liverpool.

Thermatomic Carbon Co., Sterlington, La., will build a plant in Texas for making helium.

The Foreign Markets

Imports of Drugs and Chemicals, page 125

CODLIVER OIL AND OPIUM HIGHER

London Market Firmer on Buchu, Menthol, Oil Eucalyptus, and Easier on Salicylates, Bromides, Carbolic Acid and Acetanilid—Italian Essences Easier

(*Special Cable to* DRUG & CHEMICAL MARKETS)

London, July 11—Quotations are higher on codliver oil, opium, cloves, and agar agar. The market is firmer for buchu leaves, menthol and oil eucalyptus, and easier for salicylates, bromides, carbolic acid and acetanilid. Italian essences are easier on lower exchange.

London, July 1 (by mail)—The general sentiment in business circles has been rudely shaken by the further drastic decline in the German mark and the depreciation in other Continental currencies in sympathy. A great deal of anxiety is felt as to the future, and much disappointment is expressed at the protracted delay in finding a satisfactory solution of the difficulties which are paralyzing British trade. With the mark touching 750,000 to the pound, the debacle in German currency is now so complete that German foreign trade, and to some extent their home trade also, is being conducted almost entirely in dollars or sterling. Not only are these currencies being used as money of account, but payment is also being made in British or American money. German exporters are insisting on settlement in notes, and will not even look at a banker's draft. The reason given is that all foreign paper has to be cleared through a bank, in which case 40 per cent of the amount has to be placed at the disposal of the Reichsbank, which in return pays marks at something under the rate of the day.

BRITISH DYE USERS PROTEST HIGH PRICES

Color Users' Association met at Manchester, England, recently, and heard the report of the Chairman, who told the members of a protest made to the manufacturers of dyes against high prices. He said in part:

"The users' request to reduce prices to 200 per cent above pre-war was not an unreasonable one, but the makers had stated that without financial assistance they could not possibly get down to a basic selling price of a maximum of three times pre-war. The whole cost of establishing the dye-making industry in this country was now being borne by the users. There was a further serious aspect of this situation which required to be considered, and that was the effect of the high prices of British products upon the prices of foreign color sold in this country. The British makers were not the sole beneficiaries of these high prices, for the foreign producer undoubtedly took full advantage of the artificial condition of the British market consequent upon the Prohibition Act.

"Whilst having no reason to doubt the statement by the British makers that they were making 80 per cent of the color used in this country, he was somewhat at a loss to account for the amount of color that was still being imported into this country, because if it represented only 20 per cent of the total used, the total cost to the users must be many times greater than they realized."

Brandram-Henderson, Ltd., will build a varnish and enamel plant in Montreal, and to finance its construction have issued bonds to the amount of $200,000.

FOREIGN EXCHANGE	Par	Current
Great Britain (pound sterling)	$4.886	$4.561
France (franc)	.193	.057
Italy (lira)	.193	.042
Germany (mark) per hundred	23.80	.0005
Czechoslovakia (crown) per hundred	20.30	.030
Poland (mark) per hundred	23.80	.0008
Japan (yen)	.499	.487
Spain (peseta)	.193	.142
Holland (guilder)	.402	.391
Belgium (franc)	.198	.047
Switzerland (franc)	.193	.170
Sweden (crown)	.268	.264
Denmark (crown)	.268	.174
Argentina (peso)	.424	.347
Brazil (milreis)	.279	.106
China (Silver dollar—Hongkong)	.789	.521
(Tael—Shanghai, silver)	1.082	.701
(Tael—Peking, silver)	1.156	.733

Foreign Trade Opportunities

The Department of Commerce, Washington, D. C., has received the following inquiries for drugs, chemicals and accessories. Reserved addresses may be obtained from the Bureau and its district and cooperative offices. Request for each opportunity should be on a separate sheet and state opportunity number. The Bureau does not furnish credit ratings or assume responsibility as to the standing of foreign inquirers; the usual precautions should be taken in all cases

Commodity	Number	City and Country	Purchase or Agency
Chemicals:			
Black decolorant for bleaching	6792	Turin, Italy	Agency
Chemicals, oils and greases	6765	Valparaiso, Chile	Agency
Dyes	6765	Valparaiso, Chile	Agency
Paints and varnishes	6765	Valparaiso, Chile	Agency
Drugs and pharmaceutical preparations:			
Drugs	6765	Valparaiso, Chile	Agency
Medicines	6785	Turin, Italy	Agency
Medicines, proprietary	6740	Dublin, Ireland	Agency
Medicines, sundries, hypodermics, and serums	6721	Saloniki, Greece	Purchase
Perfumery	6731	Progreso, Mexico	Agency
Chemicals	6931	Rio de Janeiro, Brazil	Purchase
Dextrines and industrial starches	6809	Barcelona, Spain	Agency
Paints, marine	6868	Vigo, Spain	Purchase
Paints and varnishes	6876	Barcelona, Spain	Purchase
Sulfate of ammonia and potassium carbonate	6808	Valencia, Spain	Agency
Turpentine, rosin, and caustic soda	6854	Milan, Italy	Purchase
Medicines	6841	Colima, Mexico	Agency
Medicines for hospitals	6867	Antung, China	Purchase
Medicines, patent, and pharmaceutical supplies	6831	Rio de Janeiro, Brazil	Purchase
Caustic soda	6903	Bremen, Germany	Purchase
Chemical products and oils	6918	Lausanne, Switzerland	Agency
Chemical products, perfumery, and dyes	6939	Buenos Aires, Argentina	Agency
Congo red, of standard quality	6951	Bombay, India	Purchase
Fertilizers	6969	Koenigsberg, Germany	Purchase
Matches	6913	Omdurman, Anglo-Egyptian Sudan	Purchase
Drugs	6939	Buenos Aires, Argentina	Agency
Medicines, patent	6911	Santo Domingo, Dominican Republic	Agency

Brunner, Mond & Co., Winnington, England, celebrated a century of business life of the company recently, presenting gold medals to several employees who had completed forty years service. In addition to using Solvay's ammonia soda process, the company is now manufacturing synthetic ammonia.

Chemische Fabrik Heyden, and Lingner Werke intend to build factories in the United States.

Leather Chemicals

BICHROMATES AND PRUSSIATES LOWER; LOWER PRICE ON COD OIL REPORTED

Chestnut Extract Easier at 2c in Tanks—Formaldehyde Weak—Drop in Arsenic Prices With Future Also Lower—Mineral Acids and Alkalis Firm—Tanners Buy Little

With a continuation of absence from the market of the tanneries, chemicals and allied materials going into consumption in this industry show weakness and a tendency to slide off in price. Of course, there are exceptions, such as the mineral acids and the alkalis which hold firm owing to the breadth of the movement into consuming channels. The chemical people and extract makers report that they are anticipating a move to buy for fall requirements during the latter part of July and during August. Such small lots of goods as are being purchased during the present summer dullness by the tanneries, are usually for immediate shipment. Practically no raw material prices are higher, all revisions of the week being downward. Bichromates and prussiates are again lower. Arsenic is weak and a decline has been registered here. Chestnut extract is easier at 2c per pound in tanks at works. Formaldehyde is soft with outsider underselling makers. Most of the price cutting is coming from resellers and importers who are forcing American producers to meet their levels to get business in most cases.

Acid Acetic—Prices are firm although demand is not as active as previously noted. Reserve stocks at works are thought to be generally small. Steady movement of goods on old orders. Prices, 28%, $3.38@$3.63 hundred bbls., f.o.b. works; 56%, $6.75@$7.00 hundred; 70%, $8.38@$8.63; glacial, $12.75@$13.53 hundred.

Acid Sulfuric—Shipments are not as large as the heavy bulk of acid moved during the first six months of the year, but they still continue steady and in fair volume. Makers are still running full time on contracts, although new business is less. As in the case of most mineral acids, reserves at works are low. A few months of dull business may permit some stocks to become accumulated. Prices unchanged for sulfuric at $15.00 @$16.00 ton, tanks, f.o.b. works; carboys at $1.25@ $1.50 hundred. Acid, 60 deg., $9.00@$10.00 ton, works.

Alkalis—The alkalis, ash and caustic soda, are in perhaps the firmest position of any products in the market. Demand is steady although not quite as active as last month, and producers continue to ship on contracts. Slightly less ash is moving than formerly. Prices are firm and unchanged. Contract basis, ash $1.45 bags, cars, works, 58%; caustic, solid, drums, cars, works, $3.16½ hundred. Spot ash in bags, less cars, $2.00; bbls., $2.25. Spot caustic or f.a.s., $3.30 solid up to $3.70 flake drums for standard brands. So-called outside brands at $3.10 spot.

Formaldehyde—Market is quoted easy at 14½c lb. for c/l at works with possibility of shading this figure on important business due to accumulation of stocks and sagging demand.

Bichromates—Weakness generally is noted among the bichromates. Demand is at a standstill, and although production is small owing to one maker being out of the field temporarily as a result of labor difficulties, it is sufficient to take care of the needs at this time. Soda bichromate has been reduced again to 8c lb. bbls works. Potash is unchanged at 11c@11¼clb. works from makers.

Extracts—Chestnut, 25%, is named lower at 2c@ 2⅛clb. for tanks and 2⅜c@2¾clb. for barrels at works, as to seller. The sixty per cent material cannot be obtained for less than 5¾c@6clb. as to quantity and seller. Stocks on spot are said to be limited, and demand active. Hemlock, 25%, is available at 3⅛c@ 3½clb. as to quantity and seller. Quebracho in good supply at 3¾c@4clb. spot for 35%, and 65% at 4½c @5clb spot as to seller and quantity. Sumac unchanged and in limited supply at $75@$80 ton; extract liquid at 7c@8clb. spot.

Prussiates—Soda prussiate is lower on spot for imported goods at 14c lb. up to 15c as to seller. Domestic material at 15½c inside. Soft in competition. Yellow potash prussiate ranges from 31c lb. up to 34½c as to seller for spot goods. These prices are somewhat lower. Red prussiate very dull with no business at 65c lb. An order might bring out a lower figure on the red.

Sodium Sulfide—Demand restricted to small lots. Prices appear to hold up well in face of limited inquiry. Solid 60%, named at $4.75 works, drums, carlots, and $3.87½ by importers at New York. Broken 60% imported spot $4.25; domestic same price as solid. Imported 30% spot N. Y. at $2.37½; domestic $2.50 hundred works. Flake sulfide at $4.00 f.o.b. works, $4.25 less cars.

Cod Oil—Little change is noted except bearish reports from Norway regarding quantity of cod oil going into industrial operations there. Spot Newfoundland oil bbls. 70c gal.; domestic oil 68c gal. Demand is confined mostly to small lots. One offer of two cents under these prices was heard on spot.

Neatsfoot Oil—Market quiet and inactive. Prices holding at 15¼c lb. for 30° cold test and 20° at 16¾clb. spot. Prime barrels at 14¼c lb.

A recent shipment of 100 tons of mangrove bark from Cape Haitien to Porto Rico may have marked the resumption of trade in this important tanning material which for the past three years has been dormant so far as the Haitian production was concerned. The mangrove tree, says Consul D. C. Woods in a report to the Department of Commerce, is found in the swamps and marsh lands of the island of Haiti.

The production of synthetic tanning materials in 1922 by four firms amounted to 1,910,519 pounds, a slight increase over that of 1921. These products are of interest as the domestic supply of tanning barks is rapidly decreasing and the United States is largely dependent upon imported natural tanning materials.

OTHER TANNING AND LEATHER MATERIALS

For reports on chemicals, oils, tanning extracts, and other raw materials for the leather industries not reported on this page, see the general market reports on the thirteen preceding pages. For the current market quotations on chemicals and allied products, with specifications and packing, see price list beginning on fifth page toward the back of the book. Prices are for goods f.o.b. New York or works for prompt shipment unless otherwise specified. Read full explanation on first page of price quotations.

Paper Chemicals

CASEIN LOWER ON NEW SPOT OFFERS; KEEN COMPETITION IN BLEACH POWDER

Steady Falling Off in Absorption of Paper Chemicals—Accumulated Stocks in Paper Centers Held Mostly by Dealers—Oxalic Acid and Aluminum Sulfate Weak

Over the past fortnight, a steady falling off in the absorption of paper chemicals by manufacturers has been reported both by local dealers and manufacturers. Although the paper industry was a heavy buyer of chemicals throughout the spring, since June first less and less in the way of chemicals has been moved into this industry. Such stocks of chemicals as have accumulated, are believed to be held more by local dealers who overestimated their needs for the summer months, than by the mills. The opinion has been expressed in several quarters that the latter as a whole are short of chemical raw materials should operations pick up suddenly. The lack of demand for spot goods and hesitancy in covering for fall needs, are taking their toll in prices, tending to drive the market off by forcing weak holders to unload elsewhere at cut prices. Lower prices for imported casein are heard here as the trade awaits the decision of the Tariff Commission on the appeal of the coated paper makers for a lower duty. The hearing will be held Aug. 13. Oxalic acid is weak owing to competition. Aluminum sulfate is also soft and reported shaded. Alums are dull. Blanc fixe and china clay are strong.

Acid Muriatic—Stocks are still indicated as small in producing quarters, although demand for prompt shipment acid is somewhat smaller. Producers shipping full quotas on contracts and continuing operations. Prices steady at $1.00@$1.10, 18 deg., carboys, works, carlots; tanks, 90c works. Other grades, 20 deg., $1.00 @$1.10 hundred, tanks, works; $1.25@$1.50, carboys. The 22 deg. $1.75@$2.00 carboys. Iron free acid, carboys, 20 deg., $1.35 works, cars; tanks, $20.00@$25.00 net ton.

Acid Oxalic—Weak and the victim of keen competition in the face of limited demand. Prices appear to have steadied at levels noted last week, 13c spot for imported or domestic, bbls. Bbls. f.o.b. works at 12¼c lb., carlots, possibly 12c lb. Weak holders of imported goods on spot still make market uncertain.

Acid Sulfuric—Shipments are not as large as the heavy bulk of acid moved during the first six months of the year, but they still continue steady and in fair volume. Makers are still running full time on contracts, although new business is less. As in the case of most mineral acids, reserves at works are low. A few months of dull business may permit some stocks to become accumulated. Prices unchanged for sulfuric at $15.00 @$16.00 ton, tanks, f.o.b. works; carboys at $1.25@ $1.50 hundred. Acid, 60 deg., $9.00@$10.00 ton, works.

Alkalis—The alkalis, ash and caustic soda, are in perhaps the firmest position of any product in the market. Demand is steady although not quite as active as last month, and producers continue to ship on contracts. Slightly less ash is moving than formerly. Prices are firm and unchanged. Contract basis, ash $1.45 bags, cars, works, 58%; caustic, solid, drums, cars, works, $3.16½ hundred. Spot ash in bags, less cars, $2.00; bbls., $2.25. Spot caustic or f.a.s., $3.30 solid up to $3.70 flake drums for standard brands. So-called "outside brands" at $3.10 spot.

Alums—Quiet with demand confined to small-lot business. Makers report dullness at $4.25 hundred for potash lump, works, bbls. Importers at $3.00@$3.25 hundred spot. Domestic ammonia alum at $3.50@$3.60 lump; $3.65@$3.75 ground.

Bleaching Powder—The market has settled down to a $1.75 per hundred affair. Although other makers are asking $1.90, they are doing nothing at this price as buyers are refusing to take on goods. Neither maker nor consumer desires to stock bleach, which is calcium hypochlorite, in hot weather, owing to its chemical instability. Spot lots, large drums, moving slowly at $2.00@$2.25 hundred. Chlorine in a big way on contract at 4c, f.o.b. works, cylinders in carlots. Spot cylinders at 8c lb. Prompt shipment works, 5½@7clb.

Casein—Imported named lower at 15clb. spot with some domestic quarters holding to 17clb. as inside. Shipment quoted at 12c lb. c.i.f. New York. During past week 99 barrels were imported at New York. The trade is awaiting with interest the report from Washington in regard to foreign and domestic costs. Hearing to be held Aug. 13.

China Clay—In good demand at the moment. With arrival of 7,498 tons at Philadelphia, the spot stocks ought to show an increase providing this material is not "sold to arrive." Domestic quoted at $18@$24 ton as to quality, f.o.b. works. English goods quoted at $14@$20 as to quality.

Blanc Fixe—Strongly held at $75.00@$85.00 ton, carlots, at works. Pulp at $40.00@$50.00. Demand dull, but stocks reported limited.

Sodium Bisulfite—Market is sagging under pressure of accumulated stocks. Unchanged, though, at $4.25 @$4.50 cwt. in barrels, at works.

Sodium Silicate—Unchanged and in good supply at $1.30@$1.40 cwt. for 40° spot drums; tanks at 75c at works; sixty degree, $1.70@$1.90 cwt.

OTHER PULP AND PAPER MATERIALS

For reports on chemicals, bleaches, fillers, and other raw materials for the pulp and paper industries not reported on this page, see the general market reports on the thirteen pages immediately preceding LEATHER CHEMICALS. For current market quotations on chemicals and allied products with specifications and packing, see price list beginning on fourth page toward the back of the book. Prices are for goods f.o.b. New York or works for prompt shipment unless otherwise specified. Read full explanation on first page of price quotations.

American Paper and Pulp Association has sent a protest to Secretary of State Hughes, Washington, against the resolution passed by the Canadian House of Commons, at Ottawa, authorizing the Dominion Government to make regulations prohibiting the exportation of freehold pulp wood, which is the raw material used by the paper mills of the United States.

The most extensive wage increases in New York State in May, says Industrial Commissioner Spientag, were granted in the paper mills where the scale is usually revised on May first.

Rubber Chemicals

LOWER PRICES FOR RUBBER CHEMICALS AS INDUSTRY REDUCES PRODUCTION

Estimates Place Reduction in Operations Ten Per Cent a Month Since Middle of May—Aniline Oil Soft—Fillers Firmly Held—Benzene Supplies Large—Acetone Small

Generally lower prices for rubber compounding ingredients with the exception of the general class of fillers, such as carbon black, zinc oxide, lithopone, blanc fixe, and china clay, have followed a slowing down in rubber operations during the past two weeks. Estimates place the reduction in rubber output, especially the tire industry, at about ten per cent per month since the middle of May. Leading producers admitted that just prior to slowing down, there had been an over-production, and that the present reaction is more from the effects of this than from generally slower business. Stocks of imported chemicals continue to accumulate and with cables of lower prices heard this week from abroad, a further weakening in the market was not unexpected. American manufacturers tend to hold prices fairly firm on the strength of contracts on which they are delivering. Aniline oil is weak although not openly quoted any lower. Benzene is in large supply. Acetone and methyl acetone are very scarce. Antimony sulfide is easier. Hexamethylene is easier abroad.

Acid Acetic—Prices are firm although demand is not as active as previously noted. Reserve stocks at works are thought to be generally small. Steady movement of goods on old orders. Prices, 28 per cent, $3.38@$3.63 hundred bbls., f.o.b. works; 56 per cent, $6.75@$7.00 hundred; 70 per cent, $8.38@$8.63; glacial, $12.75@$13.53 hundred.

Aniline Oil—Position is soft owing to lack of demand and competition for the small business available. Prices hold up quite firmly, however, at 16c lb. drums from makers or resellers. Little outside of makers' hands.

Acetone—Supplies of both C. P. and methyl acetone are small in producers' plants. Demand is smaller, but prices hold high owing to the distance production remains behind consumption. C. P. 25c lb. drums, f.o.b. works; resale at 30c lb. spot. Methyl $1.00@$1.05 gal.

Antimony Sulfide—Cheaper lots of sulfuret are offered here at 19c@20c lb. for golden and 38c@39c lb. for crimson. Demand has fallen off.

Benzol—Production continues to increase with consequent accumulation of stocks in producing centers. Demand, except for motor fuel use, is negligible, and the latter is none too active. Pure 27c@30c gal. works, tanks; 90 per cent at 25c@27c gal.

Blanc Fixe—Strongly held at $75@$85 ton, carlots, at works. Pulp at $40@$50. Demand dull, but stocks reported limited.

Carbon Black—Spot goods continue scarce with tendency for makers to favor buyers in the current market. Contracts are reported in good number involving large volume of material. Quoted at 15c@17c lb. f.o.b. works.

China Clay—In good demand at the moment. With arrival of 7,498 tons at Philadelphia, the spot stocks ought to show an increase providing this material is not "sold to arrive." Domestic quoted at $18@$24 ton as to quality, f.o.b. works. English goods quoted at $14@$20 ton as to quality.

Diphenylguanidine—Consumption has broadened out considerably within the past few months although this week has seen less demand. Quoted at $1.15@$1.20 lb. as to quantity.

Hexamethylene—Imported easy at 72c@74c lb. spot as to quantity with possibility of shading this figure on firm orders. Domestic is also quiet at 93c lb. spot.

Lithopone—Contracts are said to be good with demand along routine lines. Quoted as to quality at 7c@7½c lb. at works. Last week saw 1,104 casks entered at New York.

Sulfur—Demand continues routine only with little expansion beyond these limits. Commercial flour bbls. cars $1.35 hundred, superfine $2.00. Sulfur chloride 5c@6c lb. works.

Talc—American refined unchanged at $18@$25 ton and Italian at $24@$55 ton spot. During past week 600 bags of Italian were entered at New York. French quoted at $32@$45 ton spot.

Whiting—Demand has been mostly routine with commercial quoted at $1.00 unit; gilders' bolted, $1.10; extra gilders' bolted, $1.15; and English cliffstone, $1.50 cwt. During past week 440 bags were imported at New York.

Rubber importations, which amounted to only 72,000,000 pounds in 1911, will show a total of approximately 775,000,000 pounds in the fiscal year which ends with the current month or more than 10 times as much in the fiscal year 1923 as in 1911, says National City Bank of New York. On the other hand, prices at the present time are far below those of 1911, in which year the average import price was $1.06 per pound, in the fiscal year 1922 15c per pound, and in the nine available months of the fiscal year 1923 averaged 17c per pound.

United States imports of rubber in twelve years amounted to 4,254,000,000 pounds, valued at $2,000,000,000. The imports of the fiscal year 1923 are larger in quantity than those of any other year in the history of the rubber trade, having been approximately 775,000,000 pounds against 568,000,000 in 1922, and 632,000,000 in the high record year 1920.

The rubber trade in Germany has suffered materially as a result of the Ruhr situation, decline in marks and loss of export business in rubber goods. Consumption of rubber in Germany was 3,000,000 lb. in January and only 1,000,000 lb. in April.

OTHER COMPOUNDING INGREDIENTS

For reports on chemicals, solvents, fillers, vulcanizing compounds, colors, and other raw materials for the rubber industries not reported on this page, see the general market reports on the thirteen pages immediately preceding LEATHER CHEMICALS. For current market quotations on chemicals and allied products with specifications and packing, see price list beginning on third page toward the back of the book. Prices are for goods f.o.b. New York or works prompt shipment unless otherwise specified. Read full explanation on first page of price quotations.

THE CLEVELAND-CLIFFS IRON CO.

Pure Acetone
Methyl Acetone

CLEVELAND, OHIO

ELLIS JACKSON & COMPANY
18 NO. FRONT STREET
PHILADELPHIA

Foreign Department
29 BROADWAY, NEW YORK

GLASS, SOAP, PAPERMAKERS,
TEXTILE and FERTILIZER SUPPLIES

Textile Chemicals

SUMMER DULLNESS AND WEAK PRICES MARK TRADING IN TEXTILE CHEMICALS

Continued Downward Trend and Absence of Demand—Prussiates Soften—Alkalies Represent Firmest of Chemicals—Oxalic Acid and Bleaching Powder Weak—Dextrines for Export

The market for chemicals of the textile industry has been characterized by extreme dullness and weak prices since the last report. There has been a continued downward trend in prices owing to the absence of demand and competition between sellers. Each time an inquiry comes into the spot market, the result is usually to institute a price shading match between dealers. Operations in the various branches of the textile industry are all generally being held to a minimum at this time, using such stocks as the mills have available without replenishing. Some cotton spinning localities continue active, but in most quarters summer dullness retards activity. Of the chemical group, the alkalies represent the firmest element along with the mineral acids. Oxalic acid is weak. Bleaching powder demand is stagnant as neither dealers nor mills want to carry stocks through the hot weather. Prussiates are easier. The trend of vegetable oil prices is still downward. Export demand for dextrines is active, and, although domestic inquiry is light, prices are well maintained.

Acid Muriatic—Stocks are still indicated as small in producing quarters, although demand for prompt shipment acid is somewhat smaller. Prices steady at $1.00@$1.10, 18 deg., carboys, works, carlots; tanks, 90c works. Other grades, 20 deg., $1.00@$1.10 hundred, tanks, works; $1.25@$1.50, carboys. The 22 deg. $1.75 @$2.00 carboys. Iron free acid, carboys, 20 deg., $1.35 works, cars; tanks, $20.00@$25.00 net ton.

Acid Oxalic—Weak and the victim of keen competition in the face of limited demand. Prices appear to have steadied at levels noted last week, 13c spot for imported or domestic, bbls. Bbls. f.o.b. works at 12¼c lb., carlots, possibly 12c lb. Weak holders of imported goods on spot still make market uncertain.

Acid Sulfuric—Shipments are not as large as the heavy bulk of acid moved during the first six months of the year, but they still continue steady and in fair volume. Makers are still running full time on contracts, although new business is less. As in the case of most mineral acids, reserves at works are low. A few months of dull business may permit some stocks to become accumulated. Prices unchanged for sulfuric at $15.00@$16.00 ton, tanks, f.o.b. works; carboys at $1.25@$1.50 hundred. Acid, 60 deg., $9.00@$10.00 ton. works.

Alkalies—The alkalies, ash and caustic soda, are in perhaps the firmest position of any products in the market. Demand is steady although not quite as active as last month, and producers continue to ship on contracts. Slightly less ash is moving than formerly. Prices are firm and unchanged. Contract basis, ash $1.45 bags, cars, works, 58 per cent; caustic, solid, drums, cars, works, $3.16½ hundred. Spot ash in bags, less cars, $2.00; bbls., $2.25. Spot caustic or f.a.s., $3.30 solid up to $3.70 flake drums for standard brands. So-called outside brands at $3.10 spot.

Bleaching Powder—The market has settled down to a $1.75 per hundred affair. Although other makers are asking $1.90, they are doing nothing at this price as buyers are refusing to take on goods. Neither maker nor consumer desires to stock bleach, which is calcium hypochlorite, in hot weather, owing to its chemical instability. Spot lots, large drums, moving slowly at $2.00@$2.25 hundred.

Chlorine—Dull and in limited demand. Carlots, contract, large cylinders, works, from makers at 4clb. up. Spot cylinders ex-warehouse at 8c@9c; less cars prompt shipment works, 5¼c@7clb.

Prussiates—Soda prussiate is lower on spot for imported goods at 14clb. up to 15c as to seller. Domestic material at 15½c inside. Soft in competition. Yellow potash prussiate ranges from 31clb. up to 34½c as to seller for spot goods.

Sodium Bisulfite—Market is sagging under pressure of accumulated stocks. Unchanged, though, at $4.25 @$4.50cwt. in barrels at works.

Sodium Sulfide—Demand restricted to small lots. Prices appear to hold up well in face of limited inquiry. Solid 60 per cent, named at $4.75 works, drums, carlots, and $3.87½ by importers at New York. Broken 60 per cent imported spot $4.25; domestic same price as solid. Imported 30 per cent spot N. Y. at $2.37½; domestic $2.50 hundred works.

Olive Oil—Small lots moving only. Spot denatured at $1.10 gal. bbls. Spot foots bbls., 7¾clb.

Starches and Dextrines

Market has become slightly more active. Although plants are not operating to full capacity, sellers report good consumption for this time of year. British gum unchanged at $4.24@$4.34; white corn dextrine $3.79@ $3.89; yellow $3.84; potato 7c@8clb. Powdered starch, $3.22 in car lots; pearl, $3.12; potato, $4.50. Tapioca held at 6c@6½clb. for best grade; medium at 5c@5¼clb.

International Cotton Mills, which sold the Stark Mills, Manchester, N. H., to the Amoskeag Manufacturing Co., will build a mill at Hogansville, Ga., at an estimated cost of $2,000,000. Stark Mills of Massachusetts is the name of the subsidiary company building the new mill and $2,000,000 preferred stock and $2,000,000 common will be issued.

The cotton spinning industry during May ran at 107.7 per cent capacity on a single shift basis, according to the Census Bureau which reports that 35,390,187 spindles out of 37,334,021 spindles in place were operated at some time during the month.

OTHER TEXTILE MATERIALS

For reports on chemicals, oils, fillers, finishing compounds, bleaches, and other raw materials for the textile industries not reported on this page, see the general market reports on the thirteen pages immediately preceding LEATHER CHEMICALS. For current market quotations on chemicals and allied products with specifications and packing, see price list beginning on next page toward the back of the book. Prices are for goods f.o.b. New York or works for prompt shipment unless otherwise specified. Read full explanation on first page of price quotations.

Books of Trade Interest

THE BANK CREDIT INVESTIGATOR. By Russell F. Prudden. 12mo., 102 pages. The Bankers Publishing Co., New York.

Mr. Prudden has written an entertaining book on bank customs in relation to credit, the foundation of all business. Not one chapter is dull and many are positively fascinating in the detail with which the author points out the way to learn whether the commercial paper of a firm or company as A1 or N. G. The frankness with which Mr. Prudden discusses the way to interview a note broker or the credit man of a rival bank is refreshing, amusing and instructive. Every business man will read the book with interest and gain information of value. Every bank library needs the book for reference and for its employees.

SECOND YEAR COLLEGE CHEMISTRY (A manual of laboratory exercises). By William H. Chapin, Associate Professor of Chemistry, Oberlin College. 8vo., 112 pages. John Wiley & Sons, Inc., New York City. 1922.

This manual is intended as a laboratory guide to accompany the author's text "Second Year College Chemistry." Various experiments are outlined and can be used in connection with a course in quantitative analysis. Various chapters are devoted to valence, ionization, molecular and atomic weights, equilibrium and electrochemistry. The appendix contains a list of chemicals and apparatus to be used in the course.

MICROSCOPICAL EXAMINATION OF FOODS AND DRUGS. By Henry G. Greenish, F.I.C., F.L.S., Professor of Pharmaceutics, University of London. 8vo., 386 pages. P. Blakiston's Son & Co., Philadelphia, Third edition. 1923.

This volume, in its third edition, and intended for students of the anatomical details of foods, drugs and powders, differs very little from previous issues. The work is brought up to date by the incorporation of all recent findings in this field.

COST ACCOUNTING PROCEDURE. By William B. Castenholz, A.B., C.P.A., Director Department of Higher Accountancy, LaSalle Extension University. 8vo., 334 pages. LaSalle Extension University, Chicago. 1922.

The applications of underlying principles in cost accounting are discussed in detail and actual methods of keeping cost accounts are suggested. Most of the volume is given over to treating cost accounting by production orders. Ennes V. Rayson, A. B., C. P. A., prepared the charts which accompany the text.

OILS, PIGMENTS, PAINTS AND VARNISHES. By Rupert H. Truelove. Duodecimo, 114 pages. Isaac Pitman & Sons, New York.

The author deals tersely with his subject, but gives a comprehensive account of the manufacture of liquids used as coatings to protect objects exposed to light, air, water, heat, and cold. Considerable attention is given to linseed oil, to mills and mixers. Varnishes receive special treatment in the early chapters of the book. It is a very handy pocket reference edition, and especially valuable for school use.

THE SHOE INDUSTRY. By Frederick J. Allen, A.M., Henry Holt & Co., publishers. 8vo., 415 pages.

A complete story of the manufacture of shoes, including an interesting historical sketch of the industry.

THE LAW OF SALES. By James B. Read, Assistant Professor of Business Administration the University of Wisconsin. 223 pages, 8vo. D. Appleton & Co., New York. 1923.

It is, of course, understood that the present work is not intended to make the business man his own lawyer. It will inform and guide him on many important details on the sales of personal property, a knowledge of which will tend to prevent mistakes and lawsuits.

U. S. SOLD CHILE $8,000,000 OF CHEMICALS

The United States supplied Chile with drugs, perfumes, fine chemicals, industrial chemicals, explosives, soap and pastes valued at $8,330,000 in 1920, compared with the same products valued at $3,330,000 from the United Kingdom, $1,200,000 from France, $700,000 from Norway and Germany. Canada's trade with Chile in these products is very large.

The largest single item of importation amongst industrial chemicals relates to caustic soda, of which 1,296 tons were imported during the year; three-fourths of this quantity came from the United Kingdom. Imports from the United States amounted to 368 tons, and 32 tons were from Japan. Caustic soda 70-72 degrees pure is imported in drums of 50 kg. and is also being manufactured locally on a small scale. It is used in the industries and for the making of common soap.

Chile is a large consumer of calcium carbide, 5,362 tons having been imported during 1920. It is used for welding, for lighting on the State railways, and for street lighting in some of the towns of the southern districts. It is imported in iron drums with wooden covers of a gross weight of 112 kg. and a net weight of 110 kg. The size principally sold in the south of the Republic is 25 by 50 mm., whilst in the northern province 50 by 80 mm. is the size most in demand. The Chilean Government is anxious that calcium carbide should be made in the Republic and is offering a high premium to whoever will produce it locally, and in addition will undertake to increase the duties on imported calcium carbide as soon as it is made locally on a commercial scale. There are rich limestone deposits in the southern and in the central districts of the Republic, but it appears that coke made from Chilean coal is not suitable for the manufacture of calcium carbide. Imports by countries during the year were as follows: Norway, 3,352 tons; Sweden, 1,442 tons; United States, 283; Holland, 217; Great Britain, 34 tons, and Denmark, 34 tons.

A Canadian Trade Commissioner, writing from Singapore, on the requirements of the rubber trade, says acetic acid is used in coagulating rubber latex. Canada shipped 22,615 gallons, valued at $93,900, in 1921. Recent quotations from German exporters range around £62 10s per ton c.i.f. Penang, consignments being insured against full value. An American house was also sending quotations on 400-lb. barrels at 9½ cents per lb. The method of packing is, however, not acceptable, the form of packing required being in demijohns of 44-gallon capacity with wicker containers. One inquiry secured was for shipment of 1,000 demijohns per month, with a possible annual demand of from 12,000 to 15,000.

At the meeting of American Institute of Chemical Engineers, at Wilmington, Del., June 20 to 23, plans for the next two meetings were made. From Dec. 5 to 8 a meeting will be held at Washington, D. C., when the work of the government bureaus of research and technology as related to industry will be discussed. Next summer's session is to be held from July 15 to 18, at Denver, Col., at which time chemical engineering in the sugar industries will be reviewed.

Corkstone Products Corp., recently incorporated in Baltimore, Albert I. Rankin, general manager, has leased half an acre for the storage of magnesite, chloride, asbestos fibre, silicate colors and other raw materials used in the manufacture of oxychloride products. Additional machinery will be installed.

Globe Extract & Color Works, Brooklyn, has increased its capital from $5,000 to $200,000.

Business Brevities

April exports of carbon black were 1,648,862 pounds, valued at $256,000.

Bleaching powder exports in April were 659,335 pounds, valued at $14,649.

Gutmann Tanning Co., Chicago, will build a one-story tannery, 100 x 150 ft., tocost $150,000.

Eastern Salt Co., Boston, Mass., will erect an addition to its plant at Charlestown, Mass., to cost about $35,000.

A cotton boll weevil laboratory has been opened Florence, S. C. by U. S. Department of Agriculture. E. N. Winters is in charge.

Kill Kraw Co., West Point, Miss., will build plant for the manufacture of insect powders, to cost about $17,000. B. H. Strong is president.

Yale & Towne Mfg. Co., Stamford, Conn., has issued new literature on their Yale steel plate roller bearing trolley and Yale cast-iron trolley, which are extensively used in the chemical and allied industries.

Superior Lime & Hydrate Co., Pelham, Ala., recently organized, will build a new plant, estimated to cost $70,000. The works will have a monthly capacity of 15,000 barrels of hydrated lime. H. G. Bridgewater is head of the company.

Texas Portland Cement Co., Dallas, Tex., will soon begin an addition to its works at Manchester, near Houston, Tex., estimated to cost $30,000, exclusive of equipment. The machinery will cost about $60,000. William Moeller is general superintendent.

Singapore imports large quantities of sodium sulfite and sodium bi-sulfite, which is called for in 1-cwt. drums, importers' selling price at Singapore recently ranging around $20.00 per drum. Sodium sulfite is shipped in both ½-cwt. and 1-cwt. iron drums.

Star Salt Co., Lafayette, La., has work under way on its new plant, to develop an initial capacity of about 200 tons of salt per week, by evaporation process from the brine as pumped from the wells. The plant will cost about $55,000. John J. Kean is general manager.

Harley C. Flournoy, of Quincy, Cal., is preparing to develop lime deposits on the Western Pacific Railway at Virginia. The erection of a cement plant and lime kilns is planned. A bottling works will also be installed, the mineral waters on the property enjoying a wide reputation.

Export Chemical Co., Charlotte, N. C., will build at Tampa, Fla., the largest concentrated fertilizer plant in America. The buildings will cost more than $1,000,000. The company is capitalized for $2,350,0000. Lorenzo Wilson is president, P .S. Gilchrist, chairman board of directors, and Mangum Webb, secretary-treasurer.

The demand for bauxite cement has been stimulated by the fact that, unlike ordinary cements, it welds with asphalt, making ideal road bed, and by the fact of its rapid drying qualities. Demand now exceeds supply. England alone wants 170,000 tons, almost twice the total world output. French are building new electric furnaces intending to increase production from present 8,000 tons to 130,000 tons in 1925.

U. S. IS LARGEST BUYER OF DIVI DIVI

Venezuela Supplied More Than Fifty Per Cent of American Requirements—Colombia Ranks Second as Source of the Pods—Heavy Imports by U. S. Tanners During the War

Before the war Germany was the best market for divi divi, which is utilized as both tanning agent and dyestuff. Out of a total of 5,371 metric tons exported by Venezuela in 1913 Germany took 5,092 tons. Since 1915, however, the United States has become the principal purchaser. The January-April, 1923, imports of divi divi into the United States aggregated 3,800,982 pounds, of which Venezuela furnished 2,116,392 pounds, or 56 per cent.

The high cost of transportation during the war and the desire to eliminate all possibility of waste led to the establishment of two extract factories in Venezuela, located at the ports of Porlamar and La Guaira. At each of these plants the pure tannin is extracted from the pods (by means of a patented process into which neither heat nor the use of any chemical composition enters), and put up in pressed tablets. It is claimed that the tablets, or cakes, ready for export contain an average of 80 per cent tannic acid and 16 per cent tannc glucose. No expert figures of divi divi extract are available, according to H. M. Hoar, of the Research Division, Department of Commerce.

Colombia ranks second to Venezuela as a source of divi divi. The estimated total annual output is 7,500 tons, the bulk of which is produced in the Goajira Peninsula and exported through the port of Rio Hacha to Curacao for trans-shipment. Decreased demands during the post-war industrial depression produced a general dullness in Colombian trade in divi divi rather than lessened supplies; but, judging by recent United States imports from Curacao (the greater proportion of which came originally from Rico Hacha), Colombia must be renewing its former activity in this product.

It was not until 1915, when tanners found it necessary to utilize all available sources of tanning to meet the war demand for leather, that the use of divi divi in the United States could be regarded as worth while. In that year the imports of divi divi into this country were fourteen times as great as the pre-war level, advancing to fifty-two times that amount in 1916, and obtaining the peak in 1919, when statistics showed that imports increased to ninety times the 1913 receipts. The marked diminution in the 1921 imports reflected the general industrial and commercial depression of that year, while the improvement in the 1922 imports over those of 1921 bespoke a revival in the tanning industry. The domestic consumption of divi divi in 1919 (the latest year for which statistics are available) amounted to 4,985 tons of pods, valued at $381,689, and 12,772,793 pounds of extract, valued at $511,794.

U. S. AND WORLD METAL OUTPUT COMPARED

The 1922 year book of the American Bureau of Metal Statistics, just published, follows the main lines of the first and second issues as regards statistics of production, consumption and commercial movements of copper, lead, and zinc in the principal countries of the world during the last ten years. Statistics on gold, silver, platinum, aluminum, tin, and iron are included. The production of copper, lead and zinc in the United States in 1922 compared with the world's production was as follows:

	Copper	Lead	Zinc
World (short tons).....	987,540	1,149,268	789,284
U. S. (short tons).....	511,970	470,000	373,678

Prices Current of Fine and Heavy Chemicals, Drugs, Essential Oils, Dyestuffs and Oils

CLASSIFICATION—Prices quoted herein are listed in the following groups: **Chemicals,** including heavy and technical chemicals, fine and medicinal chemicals, aromatic chemicals and isolates, crudes and intermediates from coal-tar, various fine alkaloids, and miscellaneous products; **Crude Drugs, Essential Oils,** including oleoresins; **Fatty Oils,** including Animal, Vegetable and Fish Oils, Greases, Fats, and Tallow; **Tanning and Dye Extracts,** including miscellaneous natural tanning woods, extracts, etc. All groups are arranged in straight alphabetical order.

Packages—Prices are for large quantities in original packages of the customary trading units of weight or measure. A container given in connection with a price does not necessarily mean that this is the quantity on which the price is based. Containers named are the original packages most commonly sold in this market.

QUOTATIONS—Chemical prices quoted herein are those of American manufacturers unless otherwise specified. Quotations on imported chemicals are so designated. Where resale or "second hand" stocks of any chemical product are sufficient to be considered a factor in determining the market, prices for goods in this class will be quoted in addition to makers' prices available, and indicated as such. Chemical prices quoted herein are for goods spot New York or Metropolitan District, f. o. b. or ex-store, for immediate shipment, unless otherwise specified. Numerous domestic-made heavy or industrial chemical products are sold principally on a basis of f. o. b. works, and are thus quoted in the list herein, each instance of a "works" price, however, being specified as such.

Fatty Oils prices quoted herein are for goods spot New York unless otherwise noted; f. o. b. mills and Coast prices being designated as such. Crude Drugs and Essential Oils are quoted f. o. b. New York (Manhattan with limitations) for immediate shipment. Tanning and Dye Extracts are quoted spot New York unless otherwise noted.

WEIGHTS AND MEASURES—All quotations are made on a basis of avoirdupois pounds and ounces, and American gallons. The following equivalents are given for the reference of exporters, importers, and foreign buyers:

1 Imperial Gallon (British)	—1.20	American Gallons
1 American Gallon	— .833	Imperial Gallon
1 American Gallon	—3.79	Liters
1 Liter	— .264	American Gallon
1 American Gallon (Water)	—8.35	Pounds
1 Pound (Avoirdupois)	— .454	Kilograms
1 Kilogram	—2.20	Pounds

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Chemicals

ACETANILID, tech. 150 lb bbls.	lb	.27	.28
100 lb kgs.	lb	.28	.30
USP 200 lb bbls.	lb	.32	.33
Second Hands	lb	.32	.33
Acetic Anhydride, 85% 480 lb drs.	lb	...	.38
85%, 107 lb cbys.	lb	...	.38
92-95% 100 lb cbys.	lb	.43	.45
Acetone, CP 700 lb drs. c/l wks.	lb	...	.25
700 lb drs. lc/l wks.	lb	...	.25½
350 lb drs. lc/l wks.	lb	...	.25½
Second Hands, spot	lb	.30	.32
Acetone Oils, light, bbls, wks.	gal	1.00	1.05
Heavy, bbls., wks.	gal	1.00	1.05
Acetophenone, CP 1 lb bot.	lb	4.00	4.25
Acetphenetidin, 150 lb bbls.	lb	1.85	1.95
Acetyl Chloride, 100 lb cbys.	lb	.40	.41
ACID, 1, 2, 4, 250 lb bbls.	lb	...	1.30
Acetic, 28%, 400 lb bbls, c/l wks.	100 lb	...	3.38
28%, lc/l wks.	100 lb	...	3.63
56%, c/l wks.	100 lb	...	6.75
56%, lc/l wks.	100 lb	...	7.00
70%, bbls. c/l wks.	100 lb	...	8.38
70%, lc/l wks.	100 lb	...	8.63
80% coml. bbls. c/l wks.	100 lb	...	9.58
80% coml. lc/l wks.	100 lb	...	9.83
80% pure bbls. c/l wks.	100 lb	...	11.41
80% pure lc/l wks.	100 lb	...	11.60
Glacial, bbls. c/l wks.	100 lb	...	12.78
Glacial, lc/l wks.	100 lb	...	13.03
Glacial, USP cby wks.	100 lb	...	13.53
Acetylsalicylic, 220 lb bbls.	lb	.85	.90
Second Hands	lb	...	.83
Anthranilic, ton lots drs.	lb	...	.96
95-98%, 100 lb drs.	lb	1.00	1.10
99-100%, 100 lb drs.	lb	...	1.20
Benzoic, tech. 100 lb bbls.	lb	...	.75
Tech. ton lots bbls.	lb	...	.70
USP, 100 lb bbls.	lb	.73	.77
Boric, crys. powd. 250 lb bbls.	lb	.11	.11¼
Kegs, 100 lb	lb	.11½	.12
Broenner's, 250 lb bbls.	lb	...	1.55
Butyric, 60% pure 5 lb bot.	lb	.50	.60
C.P. 10 lb bot.	lb	1.25	1.50
Camphoric, USP VIII 1 lb bot.	lb	5.50	5.60
Carbolic, USP crys. see also Phenol 110 lb tins	lb	...	.57
25 lb tins	lb	...	.59
5 lb tins or bot.	lb	.61	.62
1 lb bot.	lb	...	.66
Liquid, USP, 1 lb bot.	lb	...	.65
ACID, Carbolic—(Continued) Crude, 25% 50 gal. bbls.	gal	.35	.36
10%, 50 gal. bbls.	gal	.30	.32
Chloracetic, mono 100 lb bbls. wks.	lb	...	.30
Di, 150 lb cbys wks.	lb	...	1.00
Tri, 425 lb bbls. wks.	lb	...	2.45
Chlorosulfonic, 1500 lb drs. wks.	lb	.15	.16
Chromic, USP 200 lb drums.	lb	...	.40
85% Pure, 200 lb drums.	lb	...	.35
Chromotropic, 300 lb bbls.	lb	...	1.25
Chrysophanic, see Chrysarobin			
Cinnamic, 5 lb cans	lb	3.00	3.25
CITRIC, USP cryst 230 lb bbls.	lb	...	.49
Powd., USP 200 lb bbls.	lb	...	.50
Imported, cryst. 112 lb kegs.	lb	.51½	.52
Single kegs	lb	.52	.53
Cleves, 250 lb bbls.	lb	1.00	1.10
Cresylic, 95% dark dr. NY.	gal	.85	.90
97-99% straw, drs. wks.	gal	...	...
97-99% pale, drs. NY.	gal	.90	1.00
97-99% decolor. drs, wks.	gal	...	...
Crude, spot, drums	gal	...	.70
Diethylbarbituric, 10 lb lots, 1 lb bot.	lb	8.50	10.50
Formic, 75% tech. 100 lb cbys.	lb	.11	.12
90%, 75 lb cbys. incl.	lb	.12	.14
Gallic, USP 150 lb bbls.	lb	.70	.75
Gamma, 225 lb bbls, wks.	lb	1.80	1.90
Bbls., ton lots wks.	lb	1.70	1.80
Glycerophosphoric, 25% 1 lb b.	lb	1.65	1.70
H, 225 lb bbls. single	lb	...	.85
Bbls. ton lots wks.	lb	...	.80
Hydriodic, 10% USP 5 lb bot.	lb	.65	.70
Hydrobromic, 48% coml. 155 lb cbys. wks.	lb	.35	.40
48% coml. 10 cbys. wks.	lb	...	.40
40% USP 155 lb cbys. wks.	lb	.45	.46
10%, USP 100 lb cbys. wks.	lb	.11	.13
Hydrochloric, see also Acid Muriatic CP, USP, 110 lb cbys.	lb	.09	.11
HYDROFLUORIC, 30% 400 lb bbls. wks.	lb	...	.07
30% bbls. c/l wks.	lb	...	.06
30% 100 lb cbys. wks.	lb	...	.07
48% single 100 lb cby, wks	lb	...	.11
48% 10 cbys. wks.	lb	...	.10
52% 100 lb cby. wks.	lb	...	.12
52% 10 cby. wks.	lb	...	.11
Acid, hydrofluoric—(continued) 60% 100 lb cby. wks.	lb	...	.14
60% 300 lb dr., wks.	lb	...	.13
White Acid, 100 lb cby. wks.	lb	...	.26
White Acid, 10 cbys. wks.	lb	...	.25
Hydrofluosilicic, 35% 450 lb bbls. wks.	lb	.10	.12
Hypophosphorous, USP 30% 5 gal. demis	lb	...	.95
USP, 10% 5 gal. demis.	lb	...	.35
LACTIC, 22% dark 500 lb bbls.	lb	.04½	.05
22% light, bbls.	lb	.05½	.06
44% dark, bbls.	lb	.09¼	.10
44% light, bbls.	lb	.11½	.12
66% bbls.	lb	...	.16
USP IX 100 lb cbys.	lb	.60	.70
USP VIII 100 lb cbys.	lb	...	.55
Laurent's, 250 lb bbls.	lb	...	.90
Metanilic, 250 lb bbls.	lb	.60	.65
Mixed, sulfuric-nitric Drums, wks. N Unit		.07¾	.08
Drums, wks. S Unit		.01	.01¼
Tank cars, wks. N Unit		.07½	.08
Tank cars, wks. S Unit		.009	.01
Molybdic, 85% pure 1 lb bot.	lb	1.75	1.85
85% pure, 100 lb kegs.	lb	...	1.30
Monosulfonic F, Delta. 50 lb tins	lb	...	2.30
MURIATIC, 20° cbys. lc/l wks. 100 lb		1.40	1.50
Cbys. c/l wks. 100 lb		1.25	1.50
Tank cars, wks. 100 lb		1.00	1.10
18°, 120 lb cbys. c/l wks. 100 lb		1.00	1.10
Tank cars, wks. 100 lb		.90	1.00
22°, 120 lb cbys. c/l wks. 100 lb		1.75	2.00
Iron, free, 20° cbys. c/l wks. 100 lb		...	1.35
Tank cars, wks. net ton		20.00	25.00
Muriatic, CP & USP, see Acid Hydrochloric			
Naphthionic, tech. 250 lb bbls.	lb	...	.62
Refined, single bbls.	lb	...	.65
Nevile & Winther's, 250 lb bbls.	lb	...	1.25

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ACID, NITRIC, 36° 135 lb			
cby. wks. .....100 lb	4.75	:	5.00
Cbys. c/l wks.....100 lb	4.50	:	4.75
38° single cbys. wks...100 lb	5.50	:	5.75
Cbys., c/l wks.....100 lb	5.25	:	5.50
42° Single cbys. wks...100 lb	6.00	:	6.50
Cbys., c/l wks.....100 lb	5.75	:	6.00
44° Single cbys. wks...100 lb	6.75	:	7.50
Cbys. c/l wks.....100 lb	6.50	:	7.00
C. P. cbys. single wks..100 lb	.14	:	.16
Oxalic, 325 lb bbls. wks.....lb	.12¼	:	.12½
Bbls., NY .....lb	.13	:	.13½
Kegs, 100 lb NY.....lb	...	:	.13¼
Imp., 560 lb casks.....lb	.13	:	.13¼
Phenylacetic, 1 lb bot.....lb	3.00	:	3.25
Phosphoric, 50% tech. 100 lb cbys. .....lb	.08	:	.09
USP, 85% syrupy, 70 lb demis .....lb	...	:	.18
Phthalic, see Phthalic Anhydride			
Picramic, 300 lb bbls.....lb	...	:	.65
Picric, 450 lb bbls.....lb	...	:	.30
Bbls. car lots wks .....lb	.20	:	.25
Pyrogallic, crys. 5 lb cans....lb	...	:	1.20
Resublimed, 5 lb cans.....lb	1.55	:	1.60
Tech. powd., 200 lb bbls...lb	...	:	.80
Salicylic, tech. 125 lb bbls...lb	.37	:	.40
USP, 100 lb bbls.....lb	.40	:	.45
Second Hands .....lb	...	:	.40
Sulfanilic, 250 lb bbls.....lb	.17	:	.20
SULFURIC, 66° 180 lb cbys.			
le/l wks. .....100 lb	1.50	:	1.75
Cbys., c/l wks.....100 lb	1.25	:	1.50
1500 lb Drums, le/l wks. .....100 lb	...	:	1.25
Drums, c/l wks.....100 lb	...	:	1.10
Tank cars, wks.....net ton	15.00	:	17.00
60° 1500 lb Drums, le/l wks. .....100 lb	.70	:	.90
Drums, c/l wks.....100 lb	.60	:	.80

Acid Sulfuric			
Tank cars, wks.....net ton	9.00	:	11.00
C. P. 175 lb cbys.....100 lb	.09	:	.11
Oleum, 20 p.c. 1500 lb drums, le/l wks. .....100 lb	1.50	:	1.75
Drums, c/l wks.....100 lb	1.25	:	1.50
Tank cars, wks.....net ton	18.00	:	20.00
Contract cars, wks.....ton	...	:	18.00
Oleum, 40% drs le/l wks.net ton	...	:	40.00
Oleum, 60% drs., le/l wks. net ton	...	:	70.00
Sulfurous, USP 6% 100 lb cbys. lb	.05	:	.06
4% 100 lb cbys.....lb	.04	:	.05
USP, 5 gal. demis.....lb	.06	:	.08
Tannic, tech. 300 lb bbls....lb	.40	:	.50
USP, powd. 200 lb bbls...lb	.70	:	.75
USP, fluffy, 50 lb bbls....lb	.75	:	.80
Tartaric USP cryst 300 lb bbls. lb	...	:	.37¼
USP, powd. 300 lb bbls..lb	...	:	.37¼
Imp. USP, 240 lb bbls.....lb	.35	:	.36
Powd. 240 lb bbls.....lb	.35	:	.36
Tobias, 250 lb bbls.....lb	1.20	:	1.30
Tungstic, 100 lb kegs.....lb	...	:	1.00
Valeric, C.P., 10 lb bot.....lb	4.00	:	4.25
Aconitine Alk, cryst. 1 oz. vls..oz	...	:	30.00
Amorphous, 1 oz. vls.....oz	...	:	20.00
Adeps Lanae, hydrous 350 lb bbls lb	.21	:	.23
Anhydrous, 350 lb bbls.....lb	.23	:	.24
Albumen, Egg, edible.....lb	...	:	1.10
Technical, see Dyers Sundries			
ALCOHOL, USP 190 pf. 50 gal. bbls. .....gal	4.78	:	4.83
Second Hands, bbls, USP 190 pf. .....gal	...	:	...
Export, USP, 190 pf.....gal	.45	:	.83
Cologne Spirit, 50 gal. bbls.gal	...	:	4.78
WOOD, see Methanol			
Alcohols, also in 50 gal. drums, extra and returnable.			
Amyl, see Oil Fusel			

ALCOHOL—(continued)			
Butyl, 50 gal. drums.....lb	...	:	.40
Cinnamic, liquid, 1 lb bot....lb	10.00	:	12.00
Crystallizable .....lb	12.00	:	15.00
Isobutyl, crude 50 gal. drums.gal	...	:	4.40
Refined, 10 lb can.....lb	...	:	.75
Isopropyl, crude 50 gal. drs..gal	...	:	2.25
Refined, 50 gal. drs.....gal	4.00	:	4.50
Ref'd, 91%, drs.....gal	...	:	3.50
Methyl, see Alcohol, Wood			
Phenylethyl, see Phenylethylalcohol			
Propyl, nml. crd 50 gal. drms.gal	...	:	4.40
Refined, 10 lb can.....lb	...	:	.75
Denatured			
No. 1 Complete Denat. 188 Proof			
50 gal. bbls. incl.....gal	.46	:	.48
50 gal. drums, extra....gal	.41	:	.43
No. 1 Special Denat. 190 Proof			
50 gal. bbl. incl.....gal	.44	:	.46
50 gal. drums, extra....gal	.38	:	.40
No. 5 Complete Denat. 188 Proof			
50 gal. bbls. incl.....gal	.43	:	.45
50 gal. drums, extra....gal	.37	:	.39
No. 6 Complete Denat. 188 Proof			
50 gal. bbls. incl.....gal	.41	:	.45
50 gal. drums, extra....gal	.36	:	.38

In addition to the regular authorized formulae for completely denatured alcohol, some 75 formulae for specially denatured alcohol are authorized for special uses. Owing to the limitations of their uses however, prices are quoted by the alcohol producers only to holders of permits allowing the use of specially denatured formulae in products authorized by the Dept. of Internal Revenue. For prices on specially denatured alcohols not listed above, consult any of the alcohol producers.

General Chemicals

A MARK OF PLEDGED RESPONSIBILITY — GENERAL CHEMICAL COMPANY — ON PRODUCTS OF STANDARD MERIT

Sulphuric Acid

Acetic Acid	Alum	Salt Cake
Chlorsulphonic Acid	Aluminum Sulphate	Tin Crystals
Hydrochloric Acid	Aqua Ammonia	Sodium Sulphide
Mixed Acids	Copperas Nitrate Iron	Sodium Silicate
Nitric Acid	Ferrous Sulphide	Sodium Phosphate

General Chemical Company
40 Rector Street, New York

Baltimore Chicago Denver Philadelphia Providence
Buffalo Cleveland Easton Pittsburgh San Francisco

The Nichols Chemical Co., Ltd., Montreal

Cable Address: Lycurgus, N. Y.

Chemicals

Alcin, USP 100 lb cases	lb	.37	.90
Alpha-Naphthol, crude 300 lb bbls.	lb	...	.65
Refined, 300 lb bbls.	lb	...	.75
Alpha-Naphthylamine, 350 lb bbls.	lb	.37	.39
Ton lots, bbls, wks.	lb	.35	.37
ALUM, Ammonia, lump 400 lb bbls. wks.	100 lb	3.50	3.65
Imp., 500 lb casks	100 lb	3.50	4.00
Ground, 400 lb bbls. wks.	100 lb	3.65	3.75
Powd., 380 lb bbls. wks.	100 lb	3.90	4.00
Chrome, 500 lb cks wks.	100 lb	5.50	6.00
Potash, lump 400 lb bbls. wks.	100 lb	...	4.50
Bbls. c/l wks.	100 lb	...	4.25
Cont. bbls c/l wks.	100 lb	...	4.25
Imp. 650 lb cases s.p.	100 lb	3.00	3.25
Ground, 400 lb bbls. wks.	100 lb	4.35	4.60
Imp. 650 lb casks	100 lb	3.00	3.25
Powd., 380 lb bbls. wks.	100 lb	4.50	4.75
Chrome, 700 lb cks wks.	100 lb	5.50	6.00
Soda, grd. 400 lb bbls. wks.	100 lb	...	4.00
Bbls. c/l wks.	100 lb	...	3.50
Aluminum, metal, c/l NY	100 lb	25.00	26.00
Chloride, anhyd. 275 lb drs.	lb	.20	.22
30% sol. 120 lb cbys.	lb	.03½	.04
Hydrate, 96% light 90 lb bbls.	lb	.18½	.20
SULFATE, Iron-free bags c/l wks.	100 lb	2.50	2.65
Imported, spot	100 lb	2.25	2.50
Comm'l., ½% iron, bgs. c/l wks.	East 100 lb	1.45	1.50

ALUMINUM SULFATE—(Continued)			
Cont. bgs. c/l wks. E.	100 lb	...	1.40
Bags, c/l wks. W.	100 lb	...	1.35
Bbls., c/l wks. East.	100 lb	...	1.60
Bulk, c/l cont. wks. E.	100 lb	...	1.35
Amidol, (see Diaminophenol)			
Amidopyrine, 10 lb boxes	lb	5.00	5.50
1 lb cartons, 10 lb	lb	...	...
Aminoazobenzene, 110 lb kgs.	lb	...	1.15
AMMONIA anhyd. 100 lb cyl.	lb	...	.30
Water, 26° 800 lb drs. wks.	lb	...	.07½
Drs. c/l wks.	lb	.07	.07¼
Imp., 800 lb drs incl spot.	lb	.06¾	.07
26° 100 lb cbys. lc/l wks.	lb	...	.08½
Cbys., c/l wks.	lb	...	.08¼
20°, 800 lb drs. lc/l wks.	lb	...	.06
Cbys., lc/l wks.	lb	...	.07½
18°, 800 lb drs. lc/l wks.	lb	...	.05½
Cbys., lc/l wks.	lb	...	.07½
16°, 800 lb drs. lc/l wks.	lb	...	.04
Cbys., lc/l wks.	lb	...	.05
Ammonium Acetate, 100 lb kegs.	lb	.35	.36
Benzoate, USP 1 lb bot.	lb	.85	.90
Bifluoride, 300 lb bbls.	lb	.22	.23
100 lb kegs	lb	.23	.24
Bromide, 50 lb boxes	lb	...	.33
Imported, 112 lb boxes	lb	.19	.20
Carb., tech. 560 lb casks	lb	...	.09½
Powd., tech. 385 lb bbls.	lb	...	.09
USP, lump, 100 lb kegs	lb	...	.09¼
Powd., 100 lb kegs	lb	...	.09
Chloride, Domestic			
White gran. 250 lb bbls. NY.	lb	...	.08
Bbls., c/l wks.	lb	...	.07¼
Gray 250 lb bbls, wks.	lb	.08¾	.08¾
Bbls, c/l wks.	lb	.08	.08¼

AMMONIUM CHLORIDE—(Continued)			
Imp. wh. 600 lb cases spot.	lb	.05½	.06½
Gray, 600 lb casks spot.	lb	.07	.08
Lump, 500 lb casks spot.	lb	.13	.14
Ichthyolate, as to brand	lb	.75	4.00
Iodide, USP 25 lb jars	lb	...	5.20
Lactate, 500 lb bbls.	lb	.15	.18
Nitrate, tech. crys. 225 lb bbls.	lb	...	...
Refined Crystals, bbls.	lb	.18	.20
CP gran. 100 lb kegs	lb	.35	.37
Oxalate, pure, 100 lb kegs	lb	.50	.57
Persulfate, 112 lb cases	lb	.55	.60
Phosphate, dibasic 200 lb bbls.	lb	.54	.60
Tech., powd. 325 lb bbls.	lb	.15	.17
Salicylate, USP 100 lb kegs.	lb	...	.85
Sulfate, bulk c/l wks.	100 lb	...	3.20
200 lb single bgs c/l wks.	100 lb	...	3.30
200 lb double bgs, f.a.s.	100 lb	...	3.65
Sulfocyanide, tech. 100 lb kgs.	lb	...	.50
CP. 25 lb jars	lb	.60	.65
Amyl Acetate, tech. 50 gal. drs.	gal	4.50	4.75
Pure, 5 gal. cans	gal	7.00	8.00
Alcohol, see Fusel Oil			
Butyrate, 1 lb bot.	lb	2.00	2.10
Formate, 1 lb bot.	lb	3.00	3.25
Salicylate, 100 lb cbys.	lb	1.45	1.60
Anethol, 2 lb bot.	lb	1.60	2.00
ANILINE OIL, 900 lb drs.	lb	.16	.17
Aniline Salt, 200 lb bbls.	lb	.24	.25
Anisic Aldehyde, 1 lb bot.	lb	3.75	4.50
Anthracene, 40-45% 600 lb casks wks.	lb	.12	.17
80-85%, 600 lb casks wks.	lb	.75	1.00
Anthraquinone, subl 125 lb bbls.	lb	1.30	1.35
30% paste 350 lb bbls.	lb	.80	.85
Antimony metal, slabs ton lots	100 lb	6.75	6.87
Needle Powd., 100 lb cases	lb	.06¾	.06⅞

The Name Associated with **"Roche"** *Fine Chemicals and Alkaloids of Rare Quality*

TRADE MARK

Aconitine and Salts
Amidopyrine
Antipyrine
Apomorphine Hydrochloride
Arecoline Hydrobromide
Atropine and Salts
Berberine and Salts
Brucine and Salts
Caffeine and Salts
Cocaine and Salts
Codeine and Salts
Colchicine Alkaloid, U. S. P.
Colchicine Salicylate
Creosote, U. S. P.
Creosote Carbonate
Cumarin
Diacetylmorphine
Alkaloid and Hydrochloride
Digitalin Pure
Duboisine Sulphate
Emetine and Salts
Eserine and Salts
Guaiacol Liquid

We are the headquarters for

SANTONIN

Crystals - U.S.P. - Powder

Guaiaco Carbonate
Homatropine and Salts
Hydrastine and Salts
Hydrastinine Hydrochloride
Hyoscine Hydrobromide
Hyoscyamine and Salts
Morphine and Salts
Phenolphthalein
Pilocarpine and Salts
Potassium Guaiacol
Sulphonate "Alta" Brand
Salicin
Saponin Purified
Scarlet Red Medicinal
Genuine "Biebrich"
Silver Proteinate
Sodium Cacodylate
Sparteine Sulphate
Strophanthin
Strychnine and Salts
Theobromine and Salts
Veratrine and Salts
Yohimbin Hydrochloride

THE HOFFMANN-LA ROCHE CHEMICAL WORKS NEW YORK

Chemicals

ANTIMONY CHLORIDE, anhyd 1000 lb			
drs.	lb	...	.35
50 lb crocks	lb	.45	.48
Sol'n. 130 lb carboys	lb	.12	.13
Oxide, 500 lb bbls.	lb	.07	.07½
Salt, dom. 500 lb bbls.	lb	.24	.25
Imp., NY	lb	.23	.24
Sulfuret. golden 500 lb bbls.	lb	...	.21
336 lb kegs	lb	...	.19
Crimson, 500 lb bbls.	lb	...	.38
336 lb kegs	lb	...	.36
Red, 500 lb bbls.	lb	...	.45
336 lb kegs	lb	...	.42
Tartrolactate, 500 lb bbls.	lb	...	.45
Antipyrine, USP, 100 lb cases	lb	3.00	3.25
Apomorphine Hydchlide, ⅛ oz. vls.	oz	...	19.65
Arecoline Hybromide, 1 oz. vial	oz.	9.00	10.50
Argols, red powd. 350 lb bbls.	lb	.07	.07½
Arsenic, metal 220 lb kegs	lb	...	.35
Red, 224 lb kegs cases	lb	.15½	.16
White, 550 lb bbls, c/l NY	lb	.12½	.13
Aspirin, see Acid Acetylsalicylic			
Atropine Alk. USP 1 oz. vial	oz	...	9.50
Sulfate, 5 oz. cans	oz	...	4.00
Single ounce	oz	...	4.17
BARIUM BINOXIDE, see Barium dioxide			
Carbonate, precip., 800 lb bbls. wks.	ton	...	70.00
Imports, bbls., spot	ton	70.00	72.00
Precip., 200 lb bgs, wks.	ton	68.00	70.00
Chloride, 800 lb bbls. wks.	ton	...	90.00
200 lb bgs. wks.	ton	88.00	90.00
Import, bbls., spot	ton	80.00	85.00
Dioxide, 88% 690 lb drs.	lb	.17	.18
Import, 83-85% 400 lb drs.	lb	.14	.16
Hydrate, 500 lb bbls.	lb	.05¼	.06
Iodide, 5 lb box	lb	...	5.15
Nitrate, 700 lb casks	lb	...	.10
Import, casks	lb	.07¾	.08
Sulfocyanide 400 lb bbls.	lb	...	.35
Barytes, floated 350 lb bbls.	ton	33.50	35.00
Bay Rum, Porto Rican, genuine			
Denat. salicy acid or tartar emetic 45 gal. bbls.	gal	3.17	3.20
Denat. quinine sulf. 45 gal. bbls.	gal	3.40	3.50
Domestic synthetic, 50 gal. bbls.	gal	1.25	1.35
Benzaldehyde, tech. 945 lb drs. wks.	lb	.75	.80
USP, 40 lb cbys.	lb	1.50	1.60
FFC, 40 lb cbys.	lb	1.75	1.85
BENZENE, 90% 8000 gal. tanks wks.	gal	.25	.27
110 gal. drs. wks.	gal	.30	.32
Pure, Tanks, wks.	gal	.27	.32
110 gal. drs. wks.	gal	.33	.35
Benzidine Base, dry 250 lb bbls.	lb	...	.82
10 bbl. lots	lb	.80	.82
Benzidine Sulfate, paste 350 lb bbls.	lb	.70	.72
Benzol, see Benzene			
Benzonaphthol, 5 lb boxes	lb	2.00	2.10
Benzoyl Chloride, 500 lb drs.	lb	...	1.00
Benzyl Acetate, 100 lb cbys.	lb	1.25	1.40
Alcohol, 5 lb bot.	lb	1.50	1.75
Benzoate, 5 lb bot.	lb	1 50	1.60
Medicinal FFC	lb	1.75	1.85
Chloride, 95% tech. 925 lb drs.	lb	...	.30
100 lb cbys.	lb	.30	.35
Redistil. 100 lb cbys.	lb	.40	.45
Formate, 1 lb bot.	lb	2.50	3.00
Berberine Hydchlide, 1 lb bot.	lb	...	22.00
Sulfate, acid or neut. 1 lb bot.	lb	...	22.00
BETA-NAPHTHOL, 350 lb bbls, wks.	lb	...	.23
Ton lots, wks.	lb	.20	.22
Sublimed	lb	.55	.60
Beta-Naphthylamine, tech. 200 lb. bbls.	lb	...	.76
Sublimed, 200 lb bbls.	lb	...	1.35
Bichloride Mercury, see Mercury Bichloride			
BISMUTH metal, 150 lb cases	lb	2.75	2.85
Second Hands	lb	2.60	2.65
Ammon. Citrate, USP 5 lb bxs.	lb	...	5.60
Betanaphtholate, 5 lb bxs.	lb	...	3.20
Citrate, USP 5 lb bxs.	lb	...	3.00
Nitrate, 25 lb jars	lb	...	1.85
Oxychloride, 250 bbls.	lb	...	3.35
Phenolsulfonate, 5 lb cans	lb	...	3.05
Salicylate, 250 bbls.	lb	...	1.95
Subcarbonate, USP, 250 bbls.	lb	...	3.25
Subrarbonate, USP 250 bbls.	lb	...	3.25
X-Ray diag. 1 lb bot.	lb	...	3.60
Subgallate, USP 175 bbls.	lb	...	2.65
Subiodide, 5 lb lots	lb	...	4.55
Subnitrate, USP, 250 bbls.	lb	...	2.75
Second Hands, bbls. or less.	lb	2.55	2.60
Cones, 1 lb bot.	lb	...	3.75
Subsalicylate, USP, 175 bbls.	lb	...	3.05
Tannate 1 lb bot.	lb	...	2.58
Bismuth Preparations quoted above on basis 25 lb lots. Smaller lots at an advance.			
Blanc Fixe, dry 400 lb bbls. wks.	ton	80.00	85.00
Imported, bbls.	ton	65.00	70.00
Paste, 650 lb bbls.	ton	50.00	55.00
BLEACHING POWDER, 700 lb drs. c/l wks.	100 lb	1.75	1.90
Drums lc/l ex-warehouse.	100 lb	2.25	2.50
Contract, c/l wks.	100 lb	1.75	1.90
F. a. s. c/l.	100 lb	...	...
Imported, spot	100 lb	...	...
Blue Ointment, see Mercury Mass, see Mercury			
Bone Ash, 100 lb kegs	lb	...	.08
Black, 200 lb bbls.	lb	.06	.08

Chemicals

Borax, USP, cryst. 400 lb bbls.. lb	.05¼	:	.05½
Powdered, U.S.P, 300 lb bbls... lb	.05½	:	.05¾
Kegs, USP, 100-150 lb ..... lb	.05¾	:	.06
Bordeaux Mixture, powd. bbls... lb	.12	:	.15
Paste, bbls. ..... lb	.08	:	.10
Borneol, 1 lb bot..... lb	...	:	**3.50**
Bromide, see potass. bromide, etc.			
Bromine, bot. in 60 lb cs. wks.. lb	...	:	**.29**
Bromobenzene, 600 lb drums.... lb	.40	:	**.42**
Bromoform, USP 5 lb bot 50 lb cs. lb	...	:	1.50
Bromstyrol, 25 lb kegs..... lb	4.00	:	4.25
Brucine Sulfate, 100 ozs..... oz	...	:	.20
Butter of Antimony, see Antimony Chloride			
CADMIUM, metal 100 lb bxs.... lb	1.15	:	1.25
Bromide, 50 lb cases jars.... lb	...	:	1.10
Iodide, 10 lb bot..... lb	...	:	4.45
Sulfide, cs. ..... lb	1.50	:	1.60
CAFFEINE ALK. USP 5 lb cans.. lb	3.75	:	4.25
Second Hands ..... lb	...	:	3.65
Hydrochloride, 1 lb bot..... lb	7.12	:	7.32
Sulfate, 1 lb bot..... lb	...	:	5.50
Citrated, 25 lb cans..... lb	3.00	:	3.25
Hydrobromide, 1 lb bot..... lb	...	:	4.75
CALCIUM Acetate, 150 lb bgs, c/l wks. .....100 lb	...	:	4.00
Arsenate, 100 lb bbls. c/l wks. lb	.17	:	.19
Bbls. lc/l wks..... lb	.18	:	.21
Bromide, 100 lb cs..... lb	...	:	.45
Calcium Carbide, 220 lb dr c/l wks lb	...	:	.04½
Drums lc/l wks..... lb	...	:	.05
Carbonate, tech. 100 lb bags c/l .....100 lb	1.00	:	1.10
USP, precip. 175 lb bbls.. lb	...	:	.04
Chloride, solid, 650 lb drs. c/l f.o.b. NY .....ton	...	:	24.50
Gran., 350 lb drs. c/l f.o.b. NY .....ton	...	:	30.50

CALCIUM CHLORIDE—(Continued)			
Flake 330 lb drs. c/l drs. f.o.b. NY .....ton	...	:	30.50
Anhyd., 350 lb drs. f.o.b. NY. lb	.13	:	.20
Glycerophosphate, 250 lb bbls.. lb	1.55	:	1.60
Hydrate, (see Lime)			
Iodide, 5 lb bot..... lb	...	:	4.35
Lactate, tech. 500 lb bbls... lb	...	:	**.13½**
Nitrate, 220 lb bbls, c/l NY. ton	...	:	40.00
Phosphate, tech. 350 lb bbls. lb	.09	:	.10
Phosphate, precip. tribasic 200 lb bbls, wks..... lb	.12	:	.13
Phosphate, mono. ..... lb	.07	:	.09
Sulfocarbolate, 100 lb kegs.... lb	.58	:	.60
Calomel, see Mercury			
CAMPHOR, Amer. ref. 250 lb bbls. ..... lb	...	:	.96
2½ lb slabs, 100 lb cs.... lb	...	:	.97
1 lb cakes, 100 lb cs..... lb	...	:	.97¼
1 oz. tab., 1 lb ctns. 100 lb cs. ..... lb	...	:	1.01¼
½ oz. tab., 1 lb ctns. 100 lb cs. ..... lb	...	:	1.02
Jap. ref. 2½ lb slabs, 100 lb cs. ..... lb	.87	:	.89
1 oz. tab., 100 lb cs. 1 lb tins ..... lb	...	:	1.00
½ oz. tab. 100 lb cs. 1 lb tins ..... lb	...	:	1.02
Chinese ref. 2½ lb slabs 100 lb cs. ..... lb	...	:	.90
Crude, 100 lb cs..... lb	.72	:	.73
Camphor, Monobrom. 100 lb cs.. lb	1.75	:	1.85
Caramel, 50 gal. bbls.....gal	.60	:	.62
Carbazol, 250 lb bbls..... lb	.75	:	.80
Carbon Bisulfide, 500 lb dr., lc/l NY lb	...	:	.06½
c/l drums, NY..... lb	...	:	.06
Carbon Black, 12½ lb bags, wks. lb	.18	:	.35

Carbon Tetrachloride, 1400 lb drs. NY ..... lb	...	:	.10½
Drums, c/l NY..... lb	.09	:	.09½
700 lb drs. single NY..... lb	...	:	.10½
Carmine, No 40 5 lb boxes..... lb	4.50	:	4.60
Casein, edib. 100 lb keg..... lb	.45	:	.50
Technical, 200 lb bbls..... lb	.16½	:	.18
Castoreum, 1 lb boxes..... lb	4.00	:	4.50
Castor Oil, USP 50 gal. bbl.... lb	...	:	.14½
Cases, 80 lb 2 tins..... lb	...	:	.15
Tech., see Fixed Oils			
Caustic Potash, see potash, caustic			
Soda, see soda, caustic			
Cellulose Acetate, 100 lb cases.. lb	1.75	:	2.00
Cerium Oxalate, USP 100 lb kgs. lb	.48	:	.53
Chalk, drop 175 lb bbls..... lb	...	:	.03¼
Precip. light 250 lb csks..... lb	.04¼	:	.04½
Precip. heavy 560 lb csks..... lb	.03¾	:	.04
Bulk .....ton	5.00	:	8.00
Precip. English, 7 lb bags.... lb	...	:	.07½
Charcoal, Bone, see bone black			
Wood, powd. 100 lb bbl..... lb	.04	:	.05
Willow, powd. 100 lb bbl..... lb	.06	:	.07
China Clay, imp. .....ton	16.00	:	22.50
Domestic, fob Mine.....ton	15.00	:	17.50
Chloral Hydrate, USP 100 lb drs. lb	.75	:	.80
25 lb jars ..... lb	.76	:	.81
Chinoidin, 170 lb cases..... lb	.65	:	.75
Chloramine-T, 5 lb bot..... lb	1.25	:	2.50
Chlorcosane, 5 lb bot..... lb	.55	:	.75
Chlorhydrin, Ethylene anhyd, 600 lb drs. ..... lb	.75	:	.85
40% soln. 100 lb cbys..... lb	.25	:	.30
CHLORINE, Liquid 2000 lb cyl. c/l wks. ..... lb	.05¼	:	.05¾
Tank car lots wks..... lb	.05¼	:	.05¾
100 lb cyl. c/l..... lb	...	:	.06
100 lb cyl lc/l wks..... lb	.06¼	:	.07
100 lb cyl. lc/l, ex-warehouse.. lb	...	:	.09
Chlorobenzene, mono. 1000 lb drs. wks. ..... lb	.11	:	.12
Drs. c/l wks. ..... lb	.10	:	.11
Tank car lots wks..... lb	...	:	.09
CHLOROFORM, USP 50 lb drs.. lb	...	:	.35
Second Hands, 650 lb drs... lb	.31	:	.33
Technical, 650 lb drums..... lb	.31	:	.33

STANDARD
WARNER
CHEMICALS
EST. 1886

Acetic Anhydride 92-95%
Free of Phosphorus Chlorine and Sulphur

Acid Phosphoric 50%
(Meeting Food and Drug Law requirements)

Sodium Phosphate Monobasic
Pharmaceutical and Pyro

Sodium Phosphate Dibasic
U. S. P. Granular and Anhydrous

Sodium Phosphate Dibasic
Granular Commercial

The Warner Chemical Company
Manufacturers
52 Vanderbilt Avenue, New York
Telephone Murray Hill 0262
Plants
Carteret, N. J. South Charleston, W. Va.

EBG
Liquid Chlorine

Service is not alone what you are capable of doing if called upon—

But what you do voluntarily and, without reserve.

E. B. G. frequently has been called upon to perform what seemed impossible tasks, and has earned a reputation for accomplishment when it has been physically possible to overcome the obstacles which presented themselves.

Electro Bleaching Gas Co.
PIONEER MANUFACTURERS of LIQUID CHLORINE
Plant: NIAGARA FALLS, N.Y.
Main office 18 East 41st Street New York *Chicago office* 05 W. Monroe St.

Chemicals

Chromium Acetate, 20° soln. 400 lb bbls.	lb	.08	.10
Fluoride, Powd. 400 lb bbls.	lb	...	.30
Soln. 400 lb bbls.	lb	...	...
Sulfate, 400 lb bbls.	lb	.07	.09
Chrysarobin, USP 5 lb cans	lb	2.00	3.00
Cinchonidin alk., pwd. 100 oz. tins	oz	...	.70
Crystal	oz.	...	.75
Sulfate, 100 oz. tins	oz	.49½	.50
Cinchonine, alk., pwd. 100 oz. tins	oz	...	.38
Crystal	oz.	...	.43
Sulfate, 100 oz. tins	oz.	...	.25
Cinnamic Alcohol, see Alcohol Cinnamic			
Cinnamic Aldehyde, 1 lb bot.	lb	3.30	3.50
Citral, 25 lb cans	lb	2.75	3.00
Citrine Ointment, see Mercury			
Citronellal, 1 lb bot.	lb	2.00	2.25
Citronellol, 1 lb bot.	lb	8.00	14.00
Cobalt metal, 100 lb kegs	lb	2.75	2.85
Cobalt Oxide, 500 lb bbls.	lb	...	2.10
10 lb tins 200 lb cases	lb	...	2.35
COCAINE alk., USP, 1 oz. vial	oz	...	11.00
Hydrochloride, USP—1 oz. vials, 25 ozs.	oz	...	7.07
In ⅛ oz. vials	oz	...	7.50
in crystals, granular, powder, or flaky crystals as desired.			
Cocoa Butter, bulk, 200 lb bales	lb	.27½	.30
Fingers, cakes, etc. 12 lb bxs.	lb	.34	.37
CODEIN alk., 1 oz. vls. 10 oz. lots	oz	...	8.62
Hydrobromide, 1 oz. vls, 10 oz. lots	oz	...	6.92
Hydrochloride, 1 oz. vls, 10 oz. lots	oz	...	7.77
Nitrate, 1 oz. vls, 10 oz. lots.	oz	...	7.77
Phosphate, 1 oz. vls, 10 oz. lots	oz	...	6.47
Salicylate, 1 oz. vls, 10 oz. lots	oz	...	6.47
Sulfate, 1 oz. vls, 10 oz. lots.	oz	...	6.92
Small Sizes. ⅛ oz. vials, 50c extra, ¼ oz. 25c extra, singles 7c extra per oz.—25 oz. lots, 10c oz. cheaper than above. Less than 10 ozs. 15c oz. higher than above.			

COD LIVER OIL, Norwegian, 30 gal. bbls.	bbl	25.00	26.00
Newfoundland, 30 gal. bbls.	bbl	...	...
Colchicine alk., USP 1 oz vial.	oz	...	30.00
Salicylate, 1 oz. vial.	oz	...	45.00
Collodion, USP 30 lb drums	lb	.22	.23
Flexible, USP 30 lb drums	lb	.27	.28
COPPER, metal electrolytic c/l NY	100 lb	14.75	14.90
Lake, c/l NY.	100 lb	14.90	15.00
Casting, c/l NY.	100 lb	14.50	14.75
Carbonate, 400 lb bbls.	lb	.19	.19½
Chloride, 250 lb bbl.	lb	...	.30
Cyanide, 100 lb drs.	lb	.58	.60
Iodide, 5 lb bot.	lb	...	5.65
Oxide, 1000 lb bbls. ton lots.	lb	.18½	.20
Sub-Acetate, verd. 440 lb bbls.	lb	.23	.28
SULFATE, crys. 450 lb bbls. lc/l spot	100 lb	5.60	5.70
Carlots, bbls. f.o.b. NY.	100 lb	5.50	5.60
Carlots, bbls., delivered.	100 lb	...	5.60
Imp. 550 lb csks.	100 lb	4.75	5.25
Powdered, 350 lb 5 bbls.	lb	.06	.06½
Copperas, bulk c/l wks.	ton	20.00	21.00
400 lb bbls. c/l wks.	ton	...	25.00
200 lb bgs. c/l wks.	ton	...	23.00
Powdered, bbls.	100 lb	1.90	2.00
Corn Syrup, 42 deg. 50 gal. bbls.	100 lb	...	3.51
43 deg. 50 gal. bbls.	100 lb	...	3.56
Corrosive Sublimate, see Mercury Bichloride			
Cotton Soluble, 100 lb bbls. wet.	lb	.40	.42
Coumarin, 25 lb tins.	lb	4.50	4.75
Second Hands	lb	...	4.35
CREAM TARTAR, USP, 300 lb bbls.	lb	...	.26½
Imp. powd. USP, 224 bbls.	lb	.25	.25½
Creosote, USP, 42 lb cbys.	lb	.50	.55
Carbonate, 1 lb bot. 25 lb	lb	1.80	2.00
Creosote Oil, 50 gal. drs.	gal	.20	.22
Cresol, USP, 400 lb bbls.	lb	.25	.27

Cyanamide, bulk c/l wks, Amm. unit	...	3.25	
DIAMINOPHENOL, 100 lb kegs.	lb	...	3.80
Dianisidine, 100 lb kegs.	lb	...	4.60
Dichlorobenzene, 1000 lb drs.	lb	.06	.07
Diethylaniline, 850 lb drs.	lb	.60	.65
Diethyl Phthalate, 25 lb cans.	lb	.55	.60
Diethyl Sulfate tech. 50 gal. drs.	lb	.20	.25
CP drums	lb	.40	.50
Digitalin, Pure, 1 oz. vial.	oz	7.75	8.25
Dimethylaniline, 840 lb drs. wks.	lb	.42	.43
Dimethylsulfate, 100 lb drs.	lb	...	.50
Dinitrobenzene, 400 lb bbls.	lb	.19½	.20
Dinitrochlorobenzene, 400 lb bbls.	lb	.19½	.20
Dinitronaphthalene, 350 lb bbls.	lb	.32	.34
Dinitrophenol, 350 lb bbls.	lb	...	.40
Dinitrotoluene, 300 lb bbls.	lb	.19	.21
Dionin, see Morphine, Ethyl			
Diphenylamine, 250 lb bbls.	lb	.48	.50
Diphenylguanidine, 170 lb bbls.	lb	1.15	1.20
Diphenyloxide, 500 lb drums	lb	.85	.90
Dover's Powder, USP 5 lb tins	lb	2.20	2.30
Duboisine Sulfate, 1 oz. vial.	oz	...	60.00
EARTH, Diatomaceous, see Kieselguhr			
Emetine, alk., 15 gr. vls.	ea	...	1.65
Hydchlide, USP 1 oz. vial.	oz	...	19.00
15 gr. vials	oz	.75	.80
EPSOM SALT, tech. 300 lb bbls. NY	100 lb	...	2.15
Bbls. c/l NY.	100 lb	...	2.00
100 lb bgs., c/l NY.	100 lb	...	1.80
Imp., 220 lb bgs. c/l NY	100 lb	1.00	1.10
USP, 300 lb bbls, 10 bbls.	100 lb	...	2.50
Carlots, bbls.	100 lb	...	2.25
Imported, 400 lb bbls.	100 lb	1.75	2.00
100 lb kegs	100 lb	1.85	2.10
Ergotin, Bonjean, 1 lb jars	lb	8.50	9.00
Eserine alk., 1 oz. vial.	oz.	...	30.00
Salicylate, USP 1 oz. vial.	oz	...	22.00
Sulfate, USP VIII, 1 oz. vial.	oz	...	17.00

FORMALDEHYDE

MECCO

Are We Supplying Your

METHANOL

Requirements?

The Miner Edgar Company

Rail and Water Facilities

110 William Street

New York

Chemicals

ETHER, USP 55 lb drums	lb	.13	.15
Anaesthesia, 55 lb drums	lb	...	.16
USP, 1880 55 lb drums	lb	...	.38
Washed, 55 lb drums	lb	...	.30
Motor, 1 lb cans	lb	.26	.27
Ether, Nitrous, 1 lb bot	lb	.92	.95
Ethyl Benzyl Aniline, 300 lb drs.	lb	...	1.30
Ethyl Acetate, 99%, 50 gal. drs.	gal	1.05	1.15
85-90% Ester, 50 gal. drs.	gal	...	.95
Carlots, drums	gal	...	.92
Tank Cars	gal	...	.90
Pure, 5 lb bot	gal	...	3.50
Benzoate, 5 lb bot	lb	1.85	2.00
Bromide 115 lb drs	lb	...	.40
Butyrate, 5 lb bot	lb	2.00	2.25
Chloride, 15 lb cyl	lb	...	.35
Cinnamate, 1 lb bot	lb	3.75	4.00
Formate, 5 lb bot	lb	2.00	2.10
Methyl Ketone, 50 gal. drums	lb	.25	.25½
Morphine, see Morphine, Ethyl			
Valerate, 5 lb bot	lb	4.50	4.75
Ethylene Bromide, 600 lb drs.	lb	...	.60
Glycol	lb	.65	1.00
Chlorhydrin, anhyd. 50 gal drs.	lb	.75	.85
40% Solution, 50 gal. bbls.	lb	.25	.30
Dichloride, 50 gal. drs	lb	.20	.25
Eucalyptol, 25 lb cans	lb	.75	.80
Eugenol, 25 lb cans	lb	2.85	3.25
Feldspar, bulk	ton	20.00	25.00
FERRIC CHLORIDE, tech. crys. 475 lb bbls.	lb	...	.08
Imported	lb	...	.07
USP, crys. 100 lb kegs	lb	...	.09
Imported	lb	...	.08
Tech. Sol'n 40° 140 lb cbys.	lb	...	.06
48°, 140 cbys	lb	...	.08
USP Sol'n 125 lb cbys	lb	...	.06½
Ferrous Chloride, crys. tech. 475 lb bbls.	lb	.06	.06½
Ferrous Sulfide, 1000 lb bbls.	100 lb	2.50	3.00
Flake White, see lead, white			
Fluorspar, 95% 220 lb bgs. ex dock	ton	...	25.00
96% bgs.	ton	...	33.50
98% bgs.	ton	...	35.00
FORMALDEHYDE, USP 400 lb bbls.			
c/l wks.	lb	...	.14½
Carboys, 100 lb lc/l wks	lb	...	.15½
Bbls. 400 lb lc/l wks	lb	...	.16
Second Hands	lb	.14	.14½
Fuller's Earth, 200 lb bgs. c/l mines	ton	15.00	17.00
Imported, 230 lb bags NY	ton	35.00	40.00
Fusel Oil, refined, 100 gal drm.	gal	...	...
Crude, 100 gal drum	gal	...	...
G. SALT, paste 350 lb bbls. basis 100%	lb	.60	.65
Gelatin, USP silver bbl. 100 lb cs.	lb	.85	.90
Gold Label, 100 lb cases	lb	...	...
Technical, 100 lb cs	lb	.60	.65
Geraniol, 50 lb cans	lb	3.00	4.50
Geranyl Acetate, 1 lb bot	lb	4.25	4.75
GLAUBER'S SALT, tech. 200 lb bags c/l wks.	100 lb	1.15	1.25
350 lb bbls. c/l wks	100 lb	1.30	1.40
Bbls. lc/l wks	100 lb	1.50	1.75
Imported, bbls, spot	100 lb	.85	1.00
USP, 300 lb bbls, Imp. sp.	100 lb	...	1.25
USP, 300 lb bbls. dom. sp.	100 lb	...	1.75
USP, 300 lb bbls. c/l wks.	100 lb	...	1.40
Glucose, (Grape Sugar) dry, 100 70° bags, c/l NY	100 lb	3.11	3.46
Syrup, Drs. & bbls, c/l NY	100 lb	...	3.41
lc/l NY	100 lb	...	3.70
GLUE, pure white, bbls	lb	.30	.35
Medium white, bbls	lb	.25	.30
French, bbls.	lb	.18	.25
High Grade, bbls	lb	.35	.40
Bone, regular, bbls	lb	.10	.12
Fish, bbls.	gal	1.50	1.75
GLYCERIN, C. P. 550 lb drums.	lb	.16	.16½
Cans, 50 lb	lb	.17½	.18
Dynamite, 1000 lb drs	lb	.14½	.15
Saponification, tanks	lb	.11	.11½
Soap, Lye, tanks	lb	.09½	.10
Goa Powder, see chrysarobin			
Graphite, crude 220 lb bags	ton	15.00	35.00
Flake, 500 lb bbls	lb	.08	.10
Ground, lump, bbls	lb	.04	.05
Guaiacol liquid, USP 25 lb cans.	lb	2.50	2.60
Benzoate, 1 lb bot	lb	...	18.00
Carbonate, 5 lb boxes	lb	5.00	5.25
HAARLEM OIL, Dom. 6 gr. cs.	gross	...	3.50
Imported, 5 gr. cases	gross	5.20	5.25
Halazone, 5 lb bot	lb	2.75	3.25
Heliotropin, 10 lb bot	lb	2.00	2.75
Hexamethylenetetramine, USP 100 lb drums	lb	.93	.95
Imported	lb	.74	.80
Rubber Makers, Impalp. Pd. drs.	lb	...	.95
Homatropine Hydrobrom. USP 1 oz. vial	oz	...	16.00
Five ozs., 1 oz. vials	oz	...	15.00
Hydrastine Alk., USP, 1 oz. vial.	oz	...	20.00
Hydchlide, USP, 1 oz: vial	oz	...	20.00
Sulfate, 1 oz. vial	oz	...	22.00
Hydrastinine Hydchlide, USP 15 gr. vials	vial	...	2.40
Hydrazobenzene, 100 lb kegs	lb	1.30	1.35
HYDROGEN PEROXIDE, 25 vol. 400 lb bbls.	lb	...	.10
USP Soln. 375 lb bbls	lb	.05	.05½
USP bot. 4 oz. cases	gross	8.00	8.25
Bot. 8 oz. cases	gross	11.75	12.00
Bot. 16 oz. cases	gross	19.75	20.00
Hydroquinone, 100 lb kegs	lb	1.25	1.35
Hyoscine Hydrobrom. USP 1 oz. vial	oz	...	21.00
Five ozs., 1 oz. vials	oz	...	20.50

R&H CHEMICALS

Yellow Prussiate *of* Potash *and* Soda

The ROESSLER & HASSLACHER CHEMICAL CO.

709 SIXTH AVENUE, NEW YORK

41ST YEAR

THE ROESSLER & HASSLACHER CHEMICAL COMPANY — CHEMISTS — NEW YORK

Chemicals

Hyoscamine Alk. Cryst., 1 oz. vial	oz	...	35.00
Alkaloid, Amorphous, 1 oz. vial	oz	...	75.00
Hydrobromide, USP 1 oz. vial	oz	...	60.00
Sulfate, 1 oz. vial	oz	...	35.00
INDOL, C. P. 1 oz. bot	oz	8.50	9.00
Iodides, see Potass. Iodide, etc.			
IODINE, crude, 200 lb kegs	lb	3.90	3.95
Resublimed, 10 lb jars	lb	...	4.55
Tincture, USP, 50 gal. bbls.	gal	4.50	4.60
Carboys	gal	4.75	4.85
Iodoform, powd. 10 lb bot.	lb	...	6.00
Crystals, 10 lb bot.	lb	...	7.00
Ionone, (violet) 1 lb bot.	lb	5.00	9.00
Iridium, metal 10oz lots	oz	...	250.00
Iron, metal by hydrogen 1 lb bot.	lb	.65	.70
IRON & AMM. CITRATE, USP 25 lb cans	lb	...	.84
Green scales, 25 lb cans	lb	...	.84
Cacodylate, 10 lb bot.	lb	9.00	9.25
Citrate, USP VIII 25 lb cans	lb	...	.99
Chloride, see ferric or ferrous			
Hypophosphite, 5 lb cans	lb	1.50	1.60
Syrup, USP VIII	lb	...	.30
Iodide, 1 lb bot.	lb	...	4.30
Syrup, USP 5 lb bot.	lb	.35	.36
Nitrate, kegs	lb	.09	.10
Com'l, bbls.	100 lb	2.75	3.25
Oxalate, scales 25 lb cans	lb	.80	.82
& Ammon. Oxalate, 25 lb bxs	lb	.45	.50
& Potassium Oxalate, 25 lb bxs.	lb	.47	.48
& Sodium Oxalate, 25 lb bxs.	lb	.40	.42
Phosphate, USP 25 lb cans	lb	...	.89
Pyrophosphate, USP 25 lb cans	lb	.90	.97
Iso-Eugenol, 1 lb bot.	lb	4.25	5.00
JALAP RESIN, lump 5 lb tins	lb	3.25	3.35
Powd., tins	lb	3.40	3.50
KIESELGUHR, 90 lb bags NY	ton	60.00	70.00
LANOLIN, see Adeps Lanae			
LEAD, metal, c/l NY	100 lb	...	6.25
Acetate, white crystals 500 lb bbls. wks.	lb	...	.14
100 to 250 lb kgs. wks.	lb	...	.14½
White, broken, bbls. wks.	100 lb	...	13.40
White, gran., bbls., wks.	100 lb	...	13.65
White, powd., bbls. wks.	lb	...	.14¾
Kegs, wks.	lb	...	.15½
Brown, broken, bbls. wks.	lb	...	.12¾
USP, 100 lb kegs	lb	...	.20
Arsenate, 100 lb bbls. lc/l wks.	lb	.25	.26
Bbls. c/l wks.	lb.	.21	.24
Paste, 600 lb bbls.	lb	.12	.13
Iodide, USP VIII 5 lb bot.	lb	3.20	3.40
Nitrate, 500 lb bbls. wks.	lb	...	.22
Oxide, lithge, 500 lb bbls.	100 lb	10.90	11.15
100 lb kegs, wks.	lb	...	.14½
Oxide, red 500 lb bbls. wks.	lb	11.40	11.65
100 lb kegs wks.	lb	...	.14½
Peroxide, 100 lb drs.	lb	...	.26
White, basic carb. 500 lb bbls. wks.	lb	.09¾	.10
Bbls. c/l wks.	100 lb	...	.09½
100 lb kegs wks.	lb	...	.14½
White, sulfate 500 lb bbls. wks.	lb	.09¼	.09½
Bbls. c/l wks.	100 lb	...	9.25
Licorice Ext, Mass, cases	lb	.25	.26
Compound powder, bbls.	lb	.11	.13
Powdered	lb	.38	.40
Sticks, 1 oz. 100 lb cases	lb	.45	.50
LIME (Salts, see Calcium Salts)			
Live, 325 lb bbls. ton lots, wks.	lb	...	.01¼
Single bbl. wks.	lb	...	.01¾
Hydrated, 167 lb bbl, ton lots, wks.	lb	...	.01½
Single bbl, wks.	lb	...	.01¾
Oyster Shell, 150 lb bbl, single.	lb	...	.03
125 lb bag	lb	...	.03
Sulfur, dry 200 lb drs. NY	lb	.08	.10
Drs. c/l NY.	lb	...	.10½
33° Soln. 50 gal. bbls. NY.	gal	.15	.16
Linalool, 5 lb bot.	lb	7.00	7.25
Linalyl Acetate, 1 lb bot.	lb	7.00	10.00
Benzoate, 1 lb bot.	lb	13.00	14.00
Litharge, see lead oxide			
Lithium Carb. USP 100 lb kgs.	lb	1.50	1.60
Bromide, 100 lb cs.	lb	1.70	1.80
Citrate, USP 100 lb kegs	lb	1.60	1.70
Iodide, 5 lb bot.	lb	...	5.40
Lithopone, 400 lb bbls. lc/l wks.	lb	.07½	.08
Bbls. c/l wks.	lb	...	.07
Imported, 400 lb bbls.	lb	.06	.06½
Litmus Cubes	lb	.90	1.00
MAGNESITE, crude	ton	...	15.00
Calcined, 500 lb bbls.	ton	...	55.00
Magnesium mtl., sticks 100 lb cs.	lb	1.25	1.30
Carb. tech. 70 lb bags NY	lb	.08	.08¼
75 lb bbls. NY.	lb	.08¾	.09
USP, 60 lb bbls.	lb	.10	.11
USP, blocks 100 lb cs. 1, 2, 4 cns.	lb	.19	.23
Chloride, fused 575 lb drs. c/l wks.	ton	...	34.00
Flaked, 350 lb drs. wks.	ton	...	36.00
Imp., fused 900 lb bbls. NY.	ton	26.00	28.00
Fluosilicate, crystals 400 lb bbls. wks.	lb	...	.15
30% soln. 500 lb bbls. wks.	lb	.07	.07¼
Soln. bbls. c/l wks.	lb	...	.08
Glycerophosphate, 5 lb tins.	lb	...	3.35
Hypophosphite, 5 lb cans.	lb	...	1.15
Oxide, USP light 100 lb bbls.	lb	...	.45
USP, heavy 250 lb bbls.	lb	...	.50
Peroxide, 5 lb cans.	lb	...	2.15
Perborate, 1 lb tins.	lb	...	2.25
Salicylate, 100 lb kegs.	lb	...	.80
Sulfate, see Epsom Salts			
Manganese Chloride, 600 lb csk. NY	lb	.09½	.10
Borate, 30%, 200 lb bbls.	lb	...	.36
100 lb kegs	lb	...	.37
Dioxide, 80-84% 900 lb bbls. NY	ton	80.00	85.00
85-90%, 900 lb bbls. NY.	ton	85.00	90.00
Hydrated, precip. 100 lb kgs.	lb	.32	.35

HF&G

GLYCERINE

The HARSHAW, FULLER & GOODWIN CO.

Hanna Building, Cleveland

New York
Philadelphia
Chicago
Cincinnati
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QUININE

Sulphate and Minor Salts

Unexcelled in Uniformity of Quality
Brilliant Crystallization and Purity of Color

Cinchonine, Cinchonidine
Quinidine
and their Salts

EMETINE CAFFEINE
YOHIMBINE QUINIC ACID

Manufactured by
N. V. Amsterdamsche Chininefabriek
Amsterdam
N. V. Bandoengsche Kininefabriek
Bandoeng
N. V. Nederlandsche Kininefabriek
Maarssen

Exclusive Distributors
R. W. GREEFF & CO., Inc.
78 FRONT ST., Cor. Old Slip, NEW YORK CITY

Chemicals

Manganese—(continued)			
Glycerophosphate, 5 lb tins	lb	...	3.05
Hypophos. USP VIII 5 lb cans	lb	...	1.65
Iodide, 1 lb bot	lb	...	6.40
Ore, bulk NY	unit	.40	.45
Sulfate, 600 lb casks NY	lb	.10	.11
Marble Flour, bulk	ton	10.00	12.00
See also Calcium Carbonate			
MENTHOL, USP, 60 lb cases	lb	...	10.00
Less cases, 5 lb tins	lb	10.25	10.50
MERCURY, metal 75 lb flask	flask	66.00	67.00
Less Flasks, 5 lb jugs	lb	1.02	1.04
Bichloride, cryst. 25 lb bxs	lb	...	1.17
Gran. powd., 200 lb kegs	lb	...	1.02
Bisulfate, 25 lb boxes	lb	...	.86
Blue Mass, 25 lb boxes	lb	...	.62
Powdered, 25 lb boxes	lb	...	.64
Blue Ointment, USP 25 lb cans 50%	lb	...	.80
USP, dilute 25 lb cans 30%	lb	...	.62
33 1/3% Mercury	lb	...	.67
Calomel, 50 lb bxs	lb	...	1.25
Citrine Ointment 25 lb jars	lb	...	.50
Iodide, green 25 lb jars	lb	...	4.00
Red, USP 25 lb jars	lb	...	4.10
Yellow, USP VIII 25 lb jars	lb	...	4.00
Red Precip. USP 25 lb bxs	lb	...	1.38
Powder, USP 25 lb bxs	lb	...	1.48
White Precip. USP 25 lb bxs	lb	...	1.49
Powder, USP 25 lb bxs	lb	...	1.54
With chalk, USP 25 lb bxs	lb	...	.62
Meta-Nitroaniline, 300 lb bbls	lb	.78	.80
Meta-Nitro-para-Toluidine, 300 lb bbls	lb	...	2.25
Meta-Phenylenediamine, 300 lb bbls	lb	.90	.95
Meta-Toluylenediamine, 300 lb bbls	lb	.90	.95

METHANOL (Wood Alcohol)			
95%, 50 gal. drms. ext	gal	1.12	1.16
97%, 50 gal. drms. ext	gal	1.14	1.17
Pure, 50 gal. drms. ext	gal	1.30	1.35
Acetone free, 50 gal. drms. ext	gal	1.25	1.40
Bbls. incl. 5c higher			
Methyl Acetone, 100gal. drums	gal	...	1.05
Tanks cars	gal	...	1.00
Anthranilate, 1 lb bot	lb	3.50	4.50
Chloride, 90 lb cyl	lb	...	.50
Cinnamate, 1 lb bot	lb	3.75	4.00
Paracresol, 1 lb bot	lb	8.00	9.00
Salicylate, USP, 50 lb cases	lb	.57	.62
500 lb drums	lb	.55	.60
Second Hands, cases	lb	.50	.52
Methylene Blue, tech. 100 lb kgs	lb	1.00	1.50
USP, medicinal 5 lb cans	lb	2.25	2.60
Michler's Ketone, 225 lb bbls	lb	...	3.75
Milk, powd. 150 lb bbls	lb	.14	.15
Milk Sugar, see sugar of milk			
Mineral Oil, see oil mineral			
Monochlorobenzene, see chlorobenzene			
Monoethylaniline, 900 lb drs	lb	...	1.00
Monomethyl paramidophenol sulfate 100 lb drs	lb	...	4.00
MORPHINE Sulfate, USP 5 oz. tins 10 oz.	oz	...	6.35
Acetate, 5 oz. tins 10 oz. lots	oz	...	6.35
Hydrobromide, 5 oz. tins 10 oz. lots	oz	...	6.35
Hydchlide, 5 oz. tins 10 oz. lots	oz	...	6.35
Diacetyl Alk., ⅛ oz. vls. 10 oz.	oz	...	10.20
Hydchlide, ⅛ oz. vls. 10 oz.	oz	...	9.25
Ethyl Hydchlide, ⅛ oz. vls. 10 oz.	oz	...	10.45
Small Sizes: ⅛ oz. vials, 50c extra; ¼s 25c extra; single oz. vls., 7c extra, over price for 5 oz. tins. 25 oz. lots in 5 oz. tins, 10c oz. lower than above schedule. Less than 10 oz. lots 15c oz. higher than above schedule.			
Musk Ambrette, 1 lb cans	lb	14.50	16.50
Ketone, 1 lb cans	lb	13.00	14.00
Xylene, 5 lb cans	lb	2.75	3.00

NAPHTHA, Solvent, 110 gal. drs. wks	gal	...	.40
8000 gal. tank cars wks	gal	...	.35
NAPHTHALENE, Flake, 175 lb bbls. wks	lb	...	.07
Bbls, c/l wks	lb	...	.06½
Bbls., second hands NY	lb	.07¼	.07½
Balls, 250 lb bbls. wks	lb	...	.08
Bbls. c/l wks	lb	...	.07⅛
Bbls., second hands NY	lb	...	.08
Crushed, bgs., wks	lb	...	.06
Crude, imp., bgs	lb	.03¾	.04
Nerolin, 1 lb tins	lb	1.75	2.00
Nickel Metal, electrolytic 100 lb kegs	lb	...	.30
Ingot, 100 lb kegs	lb	.29	.32
Salt, single 400 lb bbls, NY	lb	.11	.12
Double, 400 lb bbls, NY	lb	.10	.11
Oxide, 100 lb kegs NY	lb	.40	.42
Sulfate, 450 lb bbls	lb	.07	.07⅛
Nitre Cake, bulk wks	ton	6.50	8.00
500 lb bbls	ton	9.00	9.75
Nitrobenzene, crude 1000 lb drs. wks	lb	.09½	.10
Redistilled, 1000 lb drs. wks	lb	.10	.11
Nitronaphthalene, 550 lb bbls	lb	.20	.21
Nitrotoluene, mixed 1000 lb drs. wks	lb	.14	.15
Oil Fusel, see Fusel Oil			
OIL MINERAL, wh. 50 gal. bbls	gal	1.00	1.25
Oil Mirbane, see nitrobenzene			
Opium, see crude drugs			
Orange Mineral, 800 lb casks NY	lb	.15½	.16
500 lb bbls. NY	lb	.15¾	.16¼
Ortho-Aminophenol, 50 lb kegs	lb	...	3.00
Ortho-Anisidine, 100 lb drs	lb	...	...
Ortho-Dichlorobenzene, 1000 lb drs. wks	lb	.06	.08
Ortho-Nitrochlorobenzene, 1200 lb drs. wks	lb	.18	.20
Ortho-Nitrophenol, 350 lb 3 bbls	lb	...	1.25

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Some "BAKER'S" Chemicals Constantly Used in Industry

Acid Molybdic
Acid Phosphoric, anhydride
Ammonium Molybdate, cryst
Ammonium Persulphate, 98%
Calcium Chloride, anhydrous, granular
Copper Chloride, cupric*
Nickel Formate
Potassium Binoxalate
Potassium Thiocyanate
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Dependable CHEMICALS
FOR INDUSTRIAL USE

Chemicals

Ortho-Nitrotoluene, 1000 lb drs. wks.	lb	.09	.10
Ortho-Toluidine, 350 lb bbls.	lb	.14	.16
Oxgall, USP 5 lb bot.	lb	...	3.00
PALLADIUM, metal 10 oz. lots	oz	51.00	53.00
Pancreatin, USP 5 lb bot.	lb	1.25	1.40
Papain, 1 lb bot.	lb	1.90	1.95
Paraffin, ref'd 200 lb cs. slabs			
120-125 Deg. M. P.	lb	.03¼	.03½
125-130 Deg. M. P.	lb	.04	.04½
130-135 Deg. M. P.	lb	.04	.04¾
135-140 Deg. M. P.	lb	.05	.06¼
Para-Aminoacetanilid, 100 lb kegs	lb	1.05	1.15
Para-Aminophenol, 100 lb kegs	lb	...	1.40
Hydrochloride, 100 lb kegs	lb	...	1.65
Para-Dichlorobenzene, 50-300 lb bbls. wks.	lb	.17	.20
25-50 lb kegs	lb	.18	.22
Paraldehyde, 100 gal drs.	lb	...	.35
Paraformaldehyde, USP 100 lb cs.	lb	.52½	.55
Para-Nitroacetanilid, 300 lb bbls.	lb	.55	.60
PARA-NITROANILINE, 300 lb bbls. wks. ton	lb	.74	.75
Para-Nitrochlorobenzene, 1200 lb drs. wks.	lb	.21	.30
Para-Nitro-ortho-Toluidine, 300 lb bbls.	lb	2.75	2.85
Para-Nitrophenol, 185 lb bbls.	lb	.75	.80
Para-Nitrosodimethylaniline, 120 lb bbls.	lb	1.25	1.30
Para-Nitrotoluene, 350 lb bbls.	lb	.50	.60
Para-oxy-Benzaldehyde, 100 lb kegs	lb	1.50	1.60
Para-Phenetidin, 500 lb drs.	lb	1.55	1.80
Para-Phenylenediamine, 350 lb bbls.	lb	1.45	1.55
Para-Toluene-Sulfonamide, 175 lb bbls.	lb	.40	.41
Para-Toluene-Sulfonchloride, 410 lb bbls. wks.	lb	.25	.30
Para-Toluidine, 350 lb bbls. wks.	lb	.90	1.00
PARIS GREEN			
Arsenic Basis, 500 lb kegs	lb	.27	.29
Kegs, 100 lbs	lb	.32	.33
Kits, 56, 28, 14 lbs.	lb	.31	.33
Packages, 5 and 2 lbs.	lb	.32	.33
Packages, 1 lb, ½, ¼ lb	lb	.34	.38
Paris White, see whiting, French			
Pepsin, USP 5 lb bot.	lb	2.25	2.50
PETROLATUM, green 300 lb bbls.	lb	.02½	.03
Dark Amber 300 lb bbls.	lb	.03½	.04
Light Amber, 300 lb bbls.	lb	.04½	.05
Cream White, USP 300 lb bbls.	lb	.07	.07¼
Lily White, USP, 300 lb bbls.	lb	.09	.09¼
Snow White, USP, 300 lb bbls.	lb	.13	.13½
PHENOL, see also acid carbolic			
American makers, drums	lb	...	.50
Open market, 950 lb drs.	lb	.37	.40
240 lb des drs, wks.	lb	...	...
Natural 240 lb des drs. wks.	lb	...	.28
Imported, 336 lb des drs.	lb	...	...
Phenolphthalein, USP 100 lb drs.	lb	...	1.50
5 lb cans, 100 lb lots	lb	1.55	1.60
Phenylacetaldehyde, dom. 1 lb bot.	lb	9.00	11.00
Imported	lb	12.00	14.00
Phenyl-Alpha-Naphthylamine 100 lb kegs	lb	...	...
Phenylethylalcohol, 1 lb bot.	lb	8.00	9.00
Imported	lb	8.50	10.00
Phosgene, 100 lb cylinders	lb	...	1.00
Phosphorus Oxychloride, 175 lb cyl.	lb	.35	.40
Phosphorus, red 110 lb cs. wks.	lb	...	...
Imported, 112 lb cases	lb	...	...
Yellow, 110 lb cs. wks.	lb	.35	.40
Imported, 112 lb cases	lb	...	.30
Phosphorus Trichloride, 175 lb cyl. wks.	lb	...	.45
Phthalic Anhydride, 175 lb bbls.	lb	.30	.35
Pilocarpine Hydchlide, USP 25 oz. lots, 1 oz. vials	oz	...	7.50
Nitrate	oz	...	7.50
Single ounces	oz	...	5.75
Alkaloid, 15 gr. vls.	ea	...	.75
Piperazine Hydrate, 1 lb bot.	lb	...	16.00
Pitch, Coal-Tar, wks.	ton	30.00	33.00
Plaster Paris, tech. 250 lb bbls.	bbl	...	3.30
True Dental, 300 bbls.	bbl	...	4.50
Platinum, metal soft 10 oz. lots	oz	...	116.00
Podophyllin, 5 lb bot.	lb	5.00	5.25
Second Hands	lb	...	4.75
POTASH, CAUSTIC, solid 88-92% 700 lb drs. wks.	lb	.09	.09½
Imp., 88-92% 700 lb drs. NY.	lb	.07¼	.07½
USP, by alcohol 5 lb cans	lb	.46	.48
cases	lb	.30	.35
POTASSIUM Acetate, USP, 100 lb kegs	lb	.28	.29
Bicarbonate, crys. 220 lb bbls.	lb	.08	.09
Bichromate, crys. 900 lb casks wks.	lb	.11	.11¼
Powd., 900 lb casks wks.	lb	...	.13
Binoxalate, 300 lb bbls.	lb	.33	.34
Bisulfate, C.P. 5 lb cans	lb	...	.30
100 lb kegs	lb	...	.22
Bromate, 100 lb cs.	lb	...	.45
BROMIDE, USP cryst. 450 lb bbls.	lb	...	.26
Granular, 300 lb bbls.	lb	...	.26
Cases 100 lb	lb	...	.27
Imported, USP, 220 lb cs.	lb	.18	.19

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THE difference of a few cents a pound in the purchase price can never compensate for the heavy loss in yield of finished product that results from the use of inferior organic chemicals.

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U. S. A.

Chemicals

POTASSIUM—(Continued)			
CARBONATE, 80-85% calc.			
800 lb cks.	lb	.06½	.06¾
80-85%, hydrated, 500 lb. calx.	lb	.07¼	.07½
90-95% casks	lb	.07	.07¼
96-98% casks	lb	.07½	.07¾
99% casks	lb	.09½	.10
USP, 100 lb kegs	lb	.11	.12
Chlorate, crys. 112 lb kgs. c/l wks.	lb	.08½	.08¾
Imp. 112 lb kegs NY	lb	.07	.07½
Powd., 112 lb kegs wks.	lb	.08½	.09
Imp. kegs NY	lb	.06½	.07½
Pyrotechnic, fine powd. NY	lb	.08	.09
USP, fine crys. 110 lb kegs NY	lb	.08	.09
Citrate, USP 10 lb cans	lb	.63	.66
Cyanide, 110 lb cases	lb	.45	.50
Glycerophosphate, 75% Soln. 25 lb tins	lb	1.65	1.70
Guaiacol Sulfonate, 5 lb cans, 10 lb	lb	1.50	1.75
Hypophosphite, 10 lb cans	lb	...	.85
Iodide, USP, 100 lb cases	lb	3.75	3.85
Second Hands, cases	lb	...	3.65
Lactophosphate, 4oz bot.	oz	...	.90
Metabisulfite, 300 lb bbls.	lb	...	.25
Imp., 300 lb bbls.	lb	.14	.16
Muriate, 80%, 200 lb bags, NY K_2O unit		...	.68
Nitrate, see Saltpetre			
Oxalate, neutral, 100 lb kegs	lb	.40	.45
Perchlorate, 112 lb kegs	lb	.09	.10
Permangan, USP, crys. 112 lb drs.	lb	.17	.18½
Prussiate, red, 100 lb bbls.	lb	...	.67
500 lb casks	lb	...	.65
Prussiate, yellow, 500 lb casks	lb	.31	.34½
Salicylate, 25 lb cans	lb	.70	.72

POTASSIUM—(Continued)			
Sulfate, 200 lb bags, NY K_2O unit		...	.93
USP, VIII, 100 lb kegs	lb	.18	.20
Sulfocyanide, CP 25 lb jars	lb	...	.70
Tartrate, neutral, 100 lb kegs	lb	...	.53
Titanium Oxalate, 200 lb bbls. freight allowed	lb	...	.35
Pumice Stone, lump, 250 lb bbls.	lb	.04½	.06
Lump, bags	lb	.03½	.05
Powdered, 350 lb bbls.	lb	.02¼	.03
Pyridine, 50 gal. drums	gal	4.00	4.50
QUICKSILVER, see Mercury			
Quinidine Alk., 100oz tins	oz	.70	.75
Sulfate, 100oz tins	oz	...	.50
Quinoidine, see Chinoidin			
QUININE SULFATE, USP,			
American, 100oz tins	oz	...	.50
1oz tins, 100oz lots	oz	...	.57
Dutch, 100oz tins	oz	...	.50
Java, 100oz tins	oz	...	.50
Japanese, 100oz tins	oz	...	.50
QUININE ALK., USP, 100oz tins	oz	...	.67
Acetate	oz.	...	.88
Arsenate	oz.	...	.88
Benzoate	oz	...	.88
Bisulfate, USP	oz	...	.50
Citrate	oz	...	.62
Dihydchlide., USP	oz	...	.66
Dihybromide	oz.	...	.66
Dicarbonate, 10oz tins	oz	...	2.50
Ethyl Carbonate, 16 oz tins	oz	...	.95
Ferrocyanide	oz	...	.88
Formate	oz	...	.85
Glycerophosphate	oz	...	.88
Hydriodide	oz	...	.88
Hydrobromide, USP	oz	...	.62
Hydrochloride, USP	oz	...	.62
Hydrochlorsulfate	oz.	...	.66

QUININE—(continued)			
Hydchlide & Urea, USP	oz	...	.88
Hypophosphite	oz	...	.83
Lactate	oz	...	.78
Phenolsulfonate	oz	...	.88
Phosphate	oz	...	.74
Salicylate, USP	oz	...	.63
Tannate, USP	oz	...	.45
Tartrate	oz	...	.88
Valerate	oz	...	.89

Small Sizes: 1oz vials or cans, 50oz. lots, 5c oz extra; 5oz cans, 50oz lots 3c oz extra; 25oz cans, 50oz lots, 2c oz extra; single 1oz vials or cans, 5c extra. All minor quinine salts sold and quoted basis 100oz lots in 100oz cans. Sulfate and bisulfate sold basis 100oz lots in 100oz cans. Smaller orders or containers extra as above schedule.

R SALT, 250 lb bbls. wks.	lb	.55	.70
Red Lead, see lead oxide			
Red Precipitate, see mercury.			
Resorcin, see resorcinol.			
Resorcinol tech. 100 lb kegs	lb	1.50	1.55
USP, 25 lb cans	lb	2.25	2.35
Rochelle Salt, USP, 225 lb bbls.	lb	...	.21
Imp. USP, 300 lb bbls.	lb	.20	.21
Rosewater, triple, 5gal. damis.	gal	.90	1.10
Rotten Stone, lump imp., bbls.	lb	.07	.08
Lump selected, bbls.	lb	.09	.12
Powdered, bbls.	lb	.02	.05
Domestic, bags, mines	ton	24.00	30.00

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Chemicals

SACCHARIN, USP, 1 lb cans, 25 lb	lb	1.90	2.00
Soluble, USP, 1 lb cans, 25 lb.	lb	1.90	2.00
Safrol, 60 lb cans	lb	.55	.60
Sal Ammoniac, see Ammon. Chloride			
Salicin, USP, 1 lb cartons, 25 lb.	lb	5.00	5.25
Salol, USP, 100 lb drums	lb	.85	.90
Salt, Common, see sodium chloride.			
Salt Cake, c/l f.o.b. wks	ton	...	25.00
SALTPETRE, Double Refined			
Granular, 400-500 lb bbls., c/l wks.	lb	...	.06½
Less c/l works, bbls	lb	...	.06¾
Large Crystals, 350-400 lb bbls., c/l wks.	lb	...	.08
Small Crystals, 350-400 lb bbls. c/l wks.	lb	...	.07½
Powdered, bbls. c/l wks	lb	...	.07½
Imported, 500 lb bbls., NY	lb	...	.07
Santonin USP, 1 lb bot	lb	173.00	175.00
Powd. 1 lb bot	lb	174.50	176.50
Saponin, ex Quillaja, 5 lb tins	lb	1.25	1.54
Schaeffer's Salt, 250 lb bbls.wks.	lb	.60	.65
Saponin, ex Quillaja, 5 lb tins	lb	1.00	1.25
Satin, White	lb	.01½	.02
Seidlits Mixture, 225 lb bbls	lb	.17	.18
SILICA			
Crude, bulk, mines	ton	10.00	12.00
Refined, floated, bags	ton	18.00	30.00
Air floated, bags	ton	32.00	50.00
Extra, floated, bags	ton	55.00	65.00
SILVER, metal, American	oz	...	.99⅝
Foreign	oz	...	.65½
Colloidal, 16oz bot	oz	...	2.80
Silver Iodide, 16oz bot	oz	...	.68
Nitrate, USP, 200oz bot	oz	.44½	.45½
Nucleinate, 16oz bot	oz	.32	.37
Proteinate, 16oz bot	oz	.34	.39
Soap, Castile, 40 lb bxs	lb	.20	.25
Powd. USP, 250 lb bbls	lb	.28	.29
Green, USP, 150 lb kegs	lb	.07	.07½
Soapstone, see Talc, crude			
SODA ASH, 58% light bgs NY			
flat, ex-warehouse	100 lb	...	2.00
Bbls., ex-warehouse.	100 lb	...	2.25
Contract, Basis 58% bags c/l wks.	100 lb	1.45	1.50
Prompt and spot, Basis 58% bags c/l wks	100 lb	1.51	1.56
Soda Ash, 58% dense, bags ex-warehouse, NY	100 lb	...	2.07
Bbls., ex-warehouse.	100 lb	...	2.30
Contract, Basis 58% bags c/l wks	100 lb	...	1.51
Pmpt. and spot, Basis 58% bags c/l wks.	100 lb	1.56	1.62
Prices on soda alkalies are based on actual percentages and not N. Y. & L. test.			
SODA, CAUSTIC, 76% solid, resale, NY flat	100 lb	3.30	3.50
76% solid drs. ex-warehouse NY	100 lb	...	3.70
Contract basis 76% c/l wks.	100 lb	...	3.16½
Pmpt and spot, Basis 60% c/l wks.	100 lb	3.25½	3.29
Contract 76% low grade c/l wks. flat	100 lb	...	3.35½
Ground & flake, 76% pmpt and spot, wks c/l drs	100 lb	...	3.65
Contract, 76% drums, c/l wks flat	100 lb	...	3.60
76% drs. ex-warehouse NY	100 lb	...	4.15
USP, stick, 10 lb cans	lb	.19	.21
Pure, stick, by alcohol	lb	.25	.27
SODIUM ACETATE, crys 450 lb bbls wks.	lb	.05½	.05¾
Ton lots, bbls. wks	lb	...	.05¼
Imp. 500 lb casks	lb	...	.05⅛
Aluminum Sulfate, see alum soda.			
Benzoate, USP, 100 lb bags	lb	.65	.68
Bicarbonate, 400 lb bbls NY	100 lb	...	2.25
Bbls. c/l wks	100 lb	...	2.00
112 lb kegs wks	100 lb	...	2.25
112 lb kegs, NY	100 lb	...	2.50
Bichromate, 600 lb casks wks.	lb	.08¼	.08½
Casks, c/l wks	lb	...	.08
Casks, NY	lb	...	.08½
Bisulfite, dry powder, 500 lb bbls., wks.	lb	...	.04½
Solution, 32-40°, 500 lb bbls wks.	100 lb	1.25	1.75
Bromate, 100 lb cs.	lb	...	1.05
Bromide, USP, 500 lb bbls	lb	...	.25
Cases, 100 lb	lb	...	.26
Imp. USP, 112 lb cs.	lb	.21	.22
Cacodylate. USP, 5 lb bot, 25 lb	lb	6.00	6.25
Carbonate, sal soda, 350 lb bbls l/c/l NY	100 lb	1.30	1.35
Works c/l	100 lb	1.10	1.30
Monohydrate, 400 lb bbl, l/c/l	100 lb	...	2.45
Pure photographic, 100 lb keg	lb	.08	.09
Chlorate, 112 lb kegs, wks	lb	.06½	.07
Imported, 112 lb kegs	lb	...	.06½
Chloride, tech. 200 lb bags	ton	12.00	13.00
300 lb bbls	lb	.05	.06
Citrate, USP, IX, 100 lb kegs.	lb	...	.62
USP, VIII, 100 lb kegs	lb	...	.55
Cyanide, 96-98%, 100 lb cases wks.	lb	...	.23
Ton lots, wks	lb	...	.23
73-76%, 100 lb cases, wks.	lb	...	.20¼
Imp. 128%, 200 lb cases	lb	.21¾	.22
120%, cases	lb	.20	.20½
Fluoride, 350 lb bbls, NY imp.	lb	...	.09

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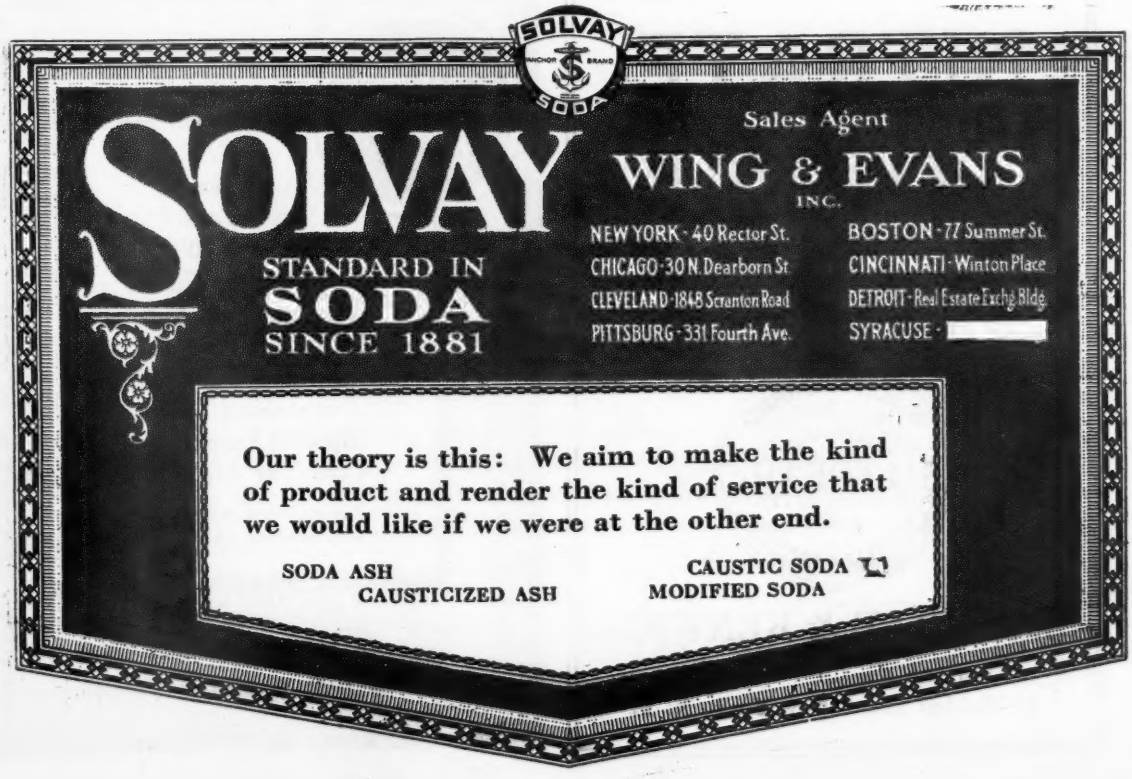
PITTSBURGH - PENNSYLVANIA

Chemicals

SODIUM—(Continued)			
Glycerophos, USP, crys 25 lb cans	lb	1.70	1.75
Powder, 25 lb tins	lb	1.75	1.80
Solution, USP 25 lb tins	lb	1.00	1.05
Hydroxide, see Soda Caustic			
Hypochlorite, Soln, 100 lb cbys.	lb	...	.05
14½% soln., 50 lb cbys	lb	...	.04
Hydrosulfite, 200 lb bbls,fob,wks.	lb	.19	.22
Hypophosphite, USP, 25 lb cans	lb	...	.75
HYPOSULFITE, tech. pea crys., 375 lb bbls. wks.	100 lb	2.90	3.30
Bbls. c/l wks.	100 lb	...	2.75
100 lb kegs wks.	100 lb	3.00	3.60
Granulated, bbls. wks.	100 lb	3.15	3.55
Bbls. c/l wks.	100 lb		3.00
Kegs wks.	100 lb	3.25	3.85
Regular crystals	100 lb	2.65	2.90
Iodide, USP, 25 lb jars	lb	...	4.25
Metanilate, 150 lb bbls.	lb	.55	.60
Naphthionate, 300 lb bbls.	lb	.60	.62
Nitrate, crude, 95%, 200 lb bgs c/l NY	100 lb	...	2.40
Futures, NY	100 lb	...	2.45
Double Refined, 400 lb bbls gran. c/l wks.	lb	...	.04¼
Nitrite, 500 lb bbls. wks.	lb	.07¼	.07½
Bbls. spot, makers	lb	...	.07½
Imp. 650 lb casks	lb	...	.07½
Ortho-Chloro-para-Toluene Sulfonate, 175 lb bbls. wks.	lb	.25	.27
Oxalate, neutral, 100 lb kegs.	lb	...	.47
Perborate, 275 lb bbls.	lb	...	.24
Imp., 225 lb drs.	lb	.18	.19
Peroxide, 200 lb cases	lb	.25	.27
Phosphate, di-sodium, tech 550 lb bbls.	lb	.03½	.03¾
USP, gran. 275 bbls.	lb	.07	.07½
Imp. gran.	lb	.05½	.06
USP, recrys 275 bbls.	lb	.10	.11
Mono-sodium 100 lb kegs.	lb	.24	.26
Tri-sodium tech. c/l, bbls.	lb	.04¼	.05
Picramate, 100 lb kegs	lb	...	.60

SODIUM—(Continued)			
Para-Toluene Sulfonate, 175 lb bbls	lb	.08	.09
PRUSSIATE, yellow, 450 lb csks.	lb	.14	.15½
250 lb bbls.	lb	...	.15½
Pyrophosphate, 100 lb kegs.	lb	.18	.22
Salicylate, 100 lb kegs	lb	.47	.52
Second Hands, USP, kegs.	lb	.48	.50
Silicate, 60° 700 lb bbls. f.a.s. NY	100 lb	...	2.00
Works, 1000 lb drums	100 lb	...	1.90
Works, tanks	100 lb	...	1.75
40° domestic, 700 lb c/l f.o.b. wks.	100 lb	...	.80
Works, 1000 lb drums	100 lb	...	.82½
Works, tanks	100 lb	...	.75
Spot, drums, bbls.	100 lb	1.30	1.50
Silicofluoride, 450 lb bbls, NY.	lb	.07¼	.07½
Sulphate, see Glauber's Salt.			
Sulfide, 60% solid, 650 lb drs lc/l wks.	lb	.05	.05¼
Drs. c/l wks.	lb	...	.04¾
Imp. 700 lb drs. NY	lb	.03⅞	.04
60% broken, 650 lb drs wks.	lb	.05	.05¼
Imp, 500 lb drs NY	lb	.04¼	.04½
30% crys. 400 lb bbls.wks.	lb	.02½	.02¾
Imp., 400 lb bbls.	lb	.02⅜	.02½
Sulfite, crys, 400 lb bbls wks.	lb	03½	.03¾
Dessicated, 400 lb bbls	lb	.09½	.10
Sulfocarbolate, USP, 100 lb kegs	lb	.36	.38
Sulfocyanide, 400 lb bbls.	lb	.45	.47
Tungstate, crys 100 lb kegs.	lb	...	.55
Dessicated, kegs	lb	...	.65
Solvent Naphtha, see Naphtha			
Spartein Sulfate, USP, 25oz bulk.	oz	.60	.70
Single oz. vial	oz.	...	.80
Starch, rice, 140 lb bags	lb	.09	.10

STRONTIUM Bromide, USP, 100 lb kegs	lb	...	.33
Carb. 600 lb bbls. wks.	lb	...	.07
100 lb kegs wks.	lb	...	.08
Iodide, USP, 25 lb jars	lb	...	4.00
Nitrate, 600 lb bbls, wks.	lb	...	.11½
Imp., bbls, NY	lb	...	.12¼
Salicylate, USP, 100 lb kegs.	lb	...	.85
STRYCHNINE Alkaloid, USP, crys 100oz tins	oz	...	1.15
Alk. powd, USP	oz	...	1.05
Acetate	oz	...	1.05
Glycerophosphate, USP	oz	...	1.05
Hydrobromide	oz	...	1.05
Hydrochloride	oz	...	1.05
Hypophosphite	oz	...	1.15
Nitrate, USP	oz	...	1.05
Phosphate	oz	...	1.05
Sulfate, USP, crys powd.	oz	...	.84
Saccharinate	oz	...	2.15
Strychnine preparations quoted bases 100oz lots in 100oz tins. Small Sizes; ⅛oz vials, 50c extra; ¼oz vials, 25c extra; single ounce vials, 7c extra. Lots of 25 ozs. 5c higher than above schedule. Lots of less than 25 ozs. 10c higher per oz.			
Sugar Milk, USP, 200 lb bbls.	lb	.21	.22
Second Hands, USP, bbls.	lb	.23	.24
Sulfonal, see Sulfonmethane.			
Sulfonmethane, USP, 5 lb bxs.	lb	...	3.50
Sulfonethylmethane, USP,bxs5 lb.	lb	...	4.50
SULFUR, crude, bulk, c/l NY.	ton	...	19.00
Crude, f.o.b. mines	ton	14.00	15.00
Brimstone, 250 lb bgs, c/l 100 lb		1.75	1.95
Less c/l bags NY	100 lb	1.85	2.10
Roll, 500 lb bbls c/l NY.	100 lb	...	2.15
Less c/l bags NY.	100 lb	2.20	2.45
Flour, Heavy, 290 lb bbls,	100 lb	2.50	3.05
Light,100%,260 lb bbls,	100 lb	2.60	3.15
Rubbermakers 100%, 240 lb bbls, NY	100 lb	2.60	3.15


SOLVAY
ANCHOR BRAND
SODA
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STANDARD IN
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NEW YORK - 40 Rector St.
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CINCINNATI - Winton Place
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Our theory is this: We aim to make the kind of product and render the kind of service that we would like if we were at the other end.
SODA ASH
CAUSTICIZED ASH
CAUSTIC SODA
MODIFIED SODA

Chemicals

SULFUR—(continued)			
Commercial, 99%, 150 lb bgs NY	100 lb	1.35	1.65
For Dusting, 99%, 100 lb bgs NY	100 lb	2.00	2.50
Flowers, 100%, 240 lb bbls NY	100 lb	3.00	3.55
Precipitated, 125 lb bbls NY	lb	.14	.16
Lac, 125 lb bbls NY	lb	.07	.10
Sulfur Chloride, red, 700 lb drs wks	lb	.05	.06
150 lb cbys wks	lb	...	.06
Yellow, 700 lb drs. wks	lb	.05	.06
150 lb cbys. wks	lb	...	.06
Sulfur Dioxide, 100 lb cyl	lb	.08	.08½
Iodide, USP, VIII, 5 lb bot.	lb	...	4.55
Sulfuric Ether, see Ether.			
Sulfuryl Chloride, 600 lb drs	lb	...	.70
TALC, Italian, 220 lb bags NY	ton	35.00	40.00
Refined, white, bags	ton	42.00	55.00
French, 220 lb bgs. NY	ton	25.00	30.00
Refined, white, bags	ton	32.00	45.00
Dom., crude, 100 lb bags NY	ton	10.00	15.00
Refined, 100 lb bags NY	ton	18.00	25.00
Tartar Emetic, tech. 700 lb bbls.	lb	.27½	.28
USP, 300 lb bbls.	lb	.34½	.35½
Terpin Hydrate, USP, 100 lb kegs	lb	.70	.72
Terpineol, CP 1000 lb drums	lb	.50	.55
Cans, 50 lb	lb	.55	.57
Imported, cans, 25 lb	lb	1.00	1.25
Terpenyl Acetate, 25 lb cans	lb	1.65	1.85
Terra Alba, No. 1, 300 lb bbls	100 lb	1.85	1.90
No. 2, bbls.	100 lb	1.25	1.35
Theobromine Alk., 5 lb cans	lb	4.00	4.50
and Sod. Salicylate, 1 lb bot.	lb	2.80	2.90
Thiocarbanilid, 170 lb bbls.	lb	.28	.30
Thymol, USP, 100 lb cans	lb	3.00	3.25
Iodide, 5 lb boxes	lb	...	6.75
TIN, Metal Straits, NY	100 lb	...	40.62
American standard, NY	100 lb	...	40.12
99% American, NY	100 lb	...	39.75
C.P mossy. 25 lb bxs NY	lb	...	...

Tin—(continued)			
Bichloride, 50% soln 100 lb bbls. wks.	lb	...	.11½
Crystals, 500 lb bbls. wks	lb	...	.30½
100 lb kegs, wks	lb	...	.31
Oxide, 400 lb bbls. wks	lb	...	.47
100 lb kegs wks	lb	...	.49
Tetrachloride, 1000 lb drs. wks.	lb	...	.25
Tolidine, 350 lb bbls.	lb	.95	1.00
Sulfate, 350 lb bbls.	lb	...	1.00
Toluene, 8000gal tank cars, wks.	gal	.29	.30
110gal drs wks	gal	.34	.35
Toluidine, Mixed, 900 lb drs. wks.	lb	.31	.32
Tribromphenol, 100 lb cases	lb	...	1.00
Trional, see Sulfonethylmethane.			
Triphenyl Phosphate, 450 lb bbls.	lb	...	.60
Tripoli, 500 lb bbls	100 lb	2.50	3.00
Tungsten NY	WO_3 unit	8.25	8.50
UREA, pharm 112 lb cases	lb	...	.40
VANILLIN, USP, 400oz cans	oz	.41	.41½
Cans, 80 ozs.	oz	...	.41½
Cans, 16 ozs.	oz	...	.42½
Verdigris, see Copper Subacetate			
Vermilion, Amer. 100 lb kegs	lb	...	.35
English, kegs	lb	...	1.30
Veratrine Sulfate, 1oz vial	oz	...	2.50
Hydrochloride, 1oz vial	oz	...	2.50
Veronal, see Acid Diethylbarbituric			
WHITE LEAD, see lead, white.			
White Precipitate, see mercury.			
Whiting, 200 lb bags, c/l wks.	ton	14.00	16.00
Bags, lc/l NY	ton	...	22.50
Gilders, bags, NY	ton	13.50	15.00
French, bags, NY	ton	...	18.00
English, bags, NY	ton	...	23.00
Witch Hazel Extract, 50gal bbls.	gal	1.20	1.25

XYLENE, 2° dist range, nitration tks. wks.	gal	...	...
110gal. drs. NY	gal	...	1.00
5° dist. range, 8000gal tanks wks.	gal	...	...
110gal. drs. wks.	gal	...	...
Commercial, 110 gal drs., wks.	gal	...	...
Tanks, wks.	gal	...	...
Xylidine, 900 lb drs.	lb	...	.50
YARA YARA, 1 lb tins	lb	1.75	2.00
Yohimbin Hydchlide, 1 oz. vial	oz.	7.00	7.50
ZINC, METAL, high grade, slabs c/l NY	100 lb	...	9.00
Common Slabs, c/l NY	100 lb	6.10	6.15
Mossy, 25 lb bxs NY	lb	...	.16
Ammonium Chloride, powd., 400 lb bbls.	lb	.07½	.08
Carb. tech, 150 lb kegs NY	lb	...	.18
USP, 100 lb kegs	lb	...	.30
Chloride, fused, 600 lb drs wks.	lb	...	.08
Drs. c/l wks.	lb	...	.08½
Imp. drs NY	lb	.06	.06¾
Granulated, 500 lb bbls. wks.	lb	.08	.09
Imported, drs. NY	lb	.06½	.07
USP, 25 lb jars	lb	...	.25
Cyanide, 100 lb drs	lb	.42	.43
Dust, 100 lb tins wks	lb	.09½	.10
500 lb bbls, kegs, lc/l wks.	lb	...	.09
500 lb bbls, kegs, c/l wks.	lb	...	.08
Iodide, 5 lb botts.	lb	...	5.20
Nitrate, 25 lb jars	lb	...	.38
Oxide, Amer. 300 lb bbls, wks.	lb	.08½	.09
Bbls c/l wks.	lb	.08¼	.08¾
French, 300 lb bbls wks.	lb	.10¼	.12¼
Bbl c/l wks.	lb	.10	.12
Bags, c/l wks.	lb	.09¾	.10¾
USP, 100 lb bbls. c/l	lb	...	.16
Ton lots, wks.	lb	...	.17
Imported, white seal, bbls.	lb	...	.13¾
Green seal, bbls.	lb	...	.10
USP, 100 lb bbls.	lb	.15	.17
Stearate, USP, 60 lb bbls.	lb	...	.23
Sulfate, 400 lb bbls. wks.	lb	.03¼	.03½
Bbls c/l wks.	lb	...	.02¾
USP, 100 lb kegs	lb	.08	.09
Sulfocarbolate, 100 lb kegs.	lb	.35	.37

NITRATE
POTASH

DOUBLE REFINED CRYSTALS
GRANULATED OR POWDERED

NIAGARA BRAND
DOUBLE REFINED
GRANULATED
SALTPETRE
POTASSIUM-NITRATE
U.S.P.
BATTELLE & RENWICK
80 MAIDEN LANE, NEW YORK

BATTELLE & RENWICK

Estb. 1840 Incp. 1902
80 Maiden Lane, New York, N. Y.

Barrett Standard

Pure Benzol
Pure Toluol
Benzol 90%
Nitration Xylol
Commercial Xylol
Solvent Naphtha
Extraction Benzols
Denaturing Benzols
Special Fractions of
Coal Tar Light Oils

For shipment in tank cars or one hundred gallon drums.

The Barrett Company
40 Rector Street B New York, N. Y.

Oils and Fertilizers

Oils

Castor, No. 1, 400 lb bbls	lb	.14½	.15
80 lb cases	lb	.15½	.16
No. 3, bbls	lb	.14	.14½
Blown, 400 lb bbls	lb	...	.15¾
China Wood, bbls., spot NY	lb	.24½	.25
8000 gal. tks. NY	lb	...	.24
July, Aug., forward, China	lb	...	.24
Coast, tanks, Aug. forward	lb	...	.22
Coconut Ceylon, 375 lb bbls, NY	lb	...	.09½
8000 gal. tanks, NY	lb	...	.08¼
Cochin, 375 lb bbls, NY	lb	.10½	.11
Tanks, NY	lb	.09¼	.09½
Manila, tanks, P. Coast	lb	...	.08
Edible, bbls, NY	lb	.10½	.10¾
Cod Newfoundland, 50 gal. bbls	gal	.70	.72
Tanks, NY	gal	...	...
Copra, bags	lb	...	.05¼
Corn, ref. 375 lb bbls. NY	lb	.12½	.12¾
Crude, tanks mills	lb	.08½	.08¾
Bbls, NY	lb	...	.10½
COTTONSEED, crude tks. mills	lb	...	...
P. S. Y., 100 bbl. lots NY	lb	...	.11¼
White, 100 bbl. lots NY	lb	...	.11½
Winter yellow, 100 bbls, NY	lb	...	.11¾
Degras, Amer. 50 gal. bbls, NY	lb	.03½	.04
English, bbls, NY	lb	.04½	.04¾
Neutral, bbls. NY	lb	.09	.14
Greases, choice white, bbls, NY	lb	...	.08½
Yellow	lb	...	.06½
Brown	lb	...	.06¼
House	lb	...	.06½
Bone naphtha	lb	...	.06½
Herring, Tanks, Coast	gal	...	...
Horse, 375 lb bbls, NY	lb	...	.10
Lard, prime steam bbls	lb	...	.11½
Compound, bbls.	lb	...	.12¾
LARD OIL, Edible prime, bbls	lb	...	.14¾
Off prime, bbls	lb	...	.12
Extra bbls.	lb	...	.11½
Extra No. 1, bbls	lb	...	.11
No. 1 bbls	lb	...	.10½
No. 2 bbls	lb	...	.10
LINSEED, raw c/l bbls. spot	gal	1.05	1.12
Five bbls., raw	gal.	1.08	1.15
Boiled, 5 bbl. lots	gal	1.10	1.17
Double boiled 5 bbl. lots	gal	1.11	1.18
Raw, l c/l bbls	gal	...	1.07
July, Aug., Sept., c/l bbls	gal	1.03	1.05
Imported, bbls., NY	gal	1.05	1.08
Tanks, NY	gal	1.04	1.05
Menhaden, crude, bbls, wks	gal	...	...
Crude, tanks wks. Balt	gal	.48	.50
Light strained, tanks	gal	...	...
Light strained, bbls, NY	gal	.80	.81
Yellow bleached, bbls, NY	gal	.82	.83
Blown, bbls, NY	gal	.90	.91
Neatsfoot, 20° c.t. bbls, NY	lb	...	.16¾
30° cold test, bbls, NY	lb	.15¼	.15½
Prime, bbls, NY	lb	...	.14¼
Oleo Oil, No. 1, bbls, NY	lb	...	.11¾
No: 2, bbls., NY	lb	...	.10½
No. 3, bbls, NY	lb	...	.09
OLIVE, denatured bbls, NY	gal	1.10	1.15
Edible, bbls., NY	gal	1.70	2.00
Foots, bbls, NY	lb	.07⅝	.08
Shipment	lb	...	.08½
Palm Lagos, 150 lb casks	lb	.06¾	.07
Niger casks	lb	.06¾	.07
Bonny old Calabar, casks	lb	...	...
Palm Kernel, 1500 lb casks NY	lb	.09⅜	.09½
Peanut, refined bbls, NY	lb	.16	.16½
Crude, mills buyers' tks	lb	...	...
Crude, bbls, NY	lb	.12	.12½
Perilla, bbls, NY	lb	.15½	.16
Poppyseed, bbls, NY	gal	2.20	2.20
Rapeseed, refined bbls, NY	gal	.82	.83
Blown, bbls., NY	gal	...	.98
Red Oil, distilled, bbls	lb	.09½	.10
Saponified, bbls.	lb	.09½	.10
Salmon, 8000 gal. tks. Coast	gal	...	...
Sesame, domestic edible bbls	gal	.90	.95
Sod Oil, bbls. NY	gal	...	.45
SOYA BEAN, crude tks. Coast	lb	.09¼	.09½
Crude, Tks. D.P., NY	lb	...	.09¼
Crude, bbls, NY	lb	.12	.12¼
Sperm, 38° c. t. bichd. bbls, NY	gal	...	.99
45° cold test, bichd. bbls, NY	gal	...	.94
STEARIC ACID, s.p. 200 lb bags	lb	.12¾	.13¼
Double pressed, bags	lb	.13	.13½
Double pressed, bgs., saponified	lb	.13	.13½
Triple pressed, bgs, distilled	lb	.14½	.15
Triple pressed, bgs, saponified	lb	.14½	.15
Stearine, oleo, bbls	lb	...	.08½
Lard, bbls.	lb	...	.13
Tallow, edible, tierces	lb	.07⅝	.08
City extra, loose	lb	...	.06¾
Tallow Oil, acidless tks, NY	lb	...	.08¾
Bbls., c/l NY	lb	...	.10½
Walnut, recde bbls, NY	lb	—	—
Whale, nat. winter bbls, NY	lb	...	.75
Bichd. winter bbls, NY	gal	.78	.80
Extra Bichd, bbls, NY	lb	.81	.82
Crude, No. 1, tanks Coast	lb	...	...
Crude, No. 2, tanks Coast	lb	...	...
Crude No. 3, tanks Coast	lb	...	...

Fertilizer Materials

Ammon. Sulf, bulk wks	100 lb	...	3.20
Double bgs, f.a.s. NY	100 lb	3.50	3.60
Blood, dried f.o.b. NY	unit	...	3.75
Bone, 3 & 50 ground steamed	ton	...	28.00
Raw, Chicago	ton	...	30.00
Cyanamide wks.	unit	2.20	2.25
Fish Scrap, dried wks	unit	...	4.00
NITRATE SODA, NY	100 lb	...	2.42½
Phosphate Rock, f.o.b. mines,			
Florida pebble, 68-78%	ton	3.25	5.50
Tennessee, 70-75%	ton	3.25	3.40
Phosphate Acid, 16% Bulk wks.	ton	...	9.00
Potassium Muriate, 80%	unit	...	.68
Sulfate	unit	...	.93
Steamed Bone Meal, NY	ton	...	35.00
Tankage, ground, NY	unit	...	3.50
High grade f.o.b. Chicago	unit	...	3.25

GENERAL CHEMICAL COMPANY · BAKER & ADAMSON

SULPHURIC ACID, C. P.

Spec. Grav. 1.84 91lbs.

THE STANDARD OF PURITY

Acidity	95% H_2SO_4
Fe	.00002%
HCl	"Nil"
As	.0000025%
Nitrogen	"Nil"
Nonvolatile	.0006%

GENERAL CHEMICAL COMPANY
BAKER AND ADAMSON WORKS
EASTON, PENNSYLVANIA
MADE IN U. S. A.

For that silky, soft "kid glovey" finish on fine shirtings, sheer nainsooks, dainty organdies and voiles, on high grade ginghams and sateens, use

Cream Softener J. B.

White goods stay white and even the most delicate shades are not affected by this creamy, white softener.

A finish cannot always be judged satisfactory immediately after it is applied. Father Time, the most critical judge, often makes an adverse decision after the goods have been on the shelf a few months.

Our Cream Softener J. B. is especially adjusted and standardized to cope with atmospheric, storage and other conditions to which the goods are subjected after finishing.

We guarantee this softener will not cause any regrets. The first and last decision will be favorable.

Allow us to send samples.

The product will prove itself.

JACQUES WOLF & CO.
Passaic, N. J.

Tannins and Dyestuffs

Naval Stores

(Carloads ex-yard N. Y.)

Spirits Turpentine, bbls.	gal	...	.93
Wood Turpentine, stm. distd. bbls.	gal	...	.91
Destructive distilled, bbls.	gal	...	.68
Pine Oil, stm dist'd, bbls,	gal	...	.70
Pitch, prime	bbl	...	6.00
Rosins. (Sold in 600 lb bbls., gross for net, quotations based on a unit of 280 lb)			
B	280 lb	...	5.80
D	280 lb	...	5.85
E	280 lb	...	5.85
F	280 lb	...	5.95
G	280 lb	...	5.95
H	280 lb	...	5.95
I	280 lb	...	6.00
K	280 lb	...	6.00
M	280 lb	...	6.00
N	280 lb	...	6.25
WG	280 lb	...	6.75
WW	280 lb	...	7.50
Rosin Oil, first run, 50 gal. bbls.	gal	...	.47
Second run, bbls.	gal	...	.49
Tar, kiln-burnt	bbl	...	13.50
Retort	bbl	...	12.50

Woods

Barwood, chips	lb	.04½	.05
Camwood, chips	lb	.09	.13
Divi Divi, pods 100-200 lb bags.	ton	38.00	40.00
Fustic, sticks	ton	30.00	35.00
Chips	lb	.04	.06
Hemlock, bark	ton	...	20.00
Hypernic, chips	lb	.06½	.07
LOGWOOD, sticks	ton	28.00	30.00
Chips 150 lb bags	lb	.02½	.03
Mangrove bark, African	ton	...	33.00
Bark, South American	ton	25.00	30.00
Myrobalans, 150 lb bags J1	ton	...	33.00
B1	ton	...	35.00
J2	ton	...	27.00
Nutgalls, see Crude Drugs.			
Oak bark, whole	ton	20.00	23.00
Ground	ton	...	25.00
Quercitron bark, rough	ton	...	10.00
Ground	ton	20.00	25.00
Sumac, Sicily, 160 lb bags	ton	76.00	80.00
Virginia, 150 lb bags	ton	...	35.00
Valonia Cups. 28-33% tan.	ton	34.00	36.00
Beard, 40% tan, 150 lb bgs.	ton	...	56.00
Wattle bark, 150 lb bags	ton	...	35.00

Extracts

Range of prices includes quality range for large quantity.

Annatto, fine	lb	.26	.29
Archil, double 600 lb bbls.	lb	.16	.18
Triple, 600 lb bbls.	lb	.17	.19
Conc., 600 lb bbls.	lb	.18	.20
Chestnut, clarified, 25% tks. wks.	lb	.02	.02½
Bbls., wks.	lb	.02⅝	.02¾
Powd., 60% 100 lb bbls. wks.	lb	.05¾	.06
Decolorized, bbls. wks.	lb	.08	.09
Cudbear, English	lb	.21	.23
Cutch, Rangoon, 100 lb bales.	lb	.13	.16
Borneo, solid, 100 lb bales.	lb	.04¾	.05½
Liquid, 450 lb bbls.	lb	.10	.11
Tablets, 120 lb boxes	lb	.13	.14
Flavine	lb	.90	.95
Fustic, solid 50 lb boxes	lb	.14	.18
Crystals, 100 lb boxes	lb	.22	.24
Liquid, 51°, 600 lb bbls.	lb	.10	.14
Gal extract	lb	.16	.18
Gambier, 25% liq. 450 lb bbls.	lb	.08½	.09½
Common, 200 lb cases	lb	.10¾	.11
Singapore cubes, 150 lb bags	lb	...	...
HEMATINE, Paste, 500 lb bbls.	lb	.11½	.13½
Crystals, 400 lb bbls.	lb	.16	.20
Hemlock, 25% 600 lb bbls. wks.	lb	.03½	.03½
Hypernic, 51°, 600 lb bbls.	lb	.15	.20
Indigo, Madras bbls.	lb	.85	.90
Manila, bbls.	lb		1.30
Larch, 25%, 600 lb bbls., wks.	lb	.03½	.03¾
Powd. 100 lb bags, wks.	lb	.07½	.08
Logwood, 51°, 450 lb bbls.	lb	.07½	.12½
Solid, 50 lb boxes	lb	.15	.21
Madder, Dutch	lb.	.28	.30
Mangrove, 55% 400 lb bbls.	lb	.03½	.04
Myrobalans, 25% liquid bbls.	lb	.04	.05
50% solid, 50 lb boxes	lb	.04½	.05
Oak, tanks wks.	lb	.04	.04½
23-25% liq. 600 lb bbls. wks.	lb	.05	.05¾
Osage Orange, 51° liquid	lb	.07	.08
Powd. 100 lb bags	lb	.14	.15
Persian Berries	lb	.27	.30
QUEBRACHO, 35% liquid tks.	lb	.03¼	.04
450 lb bbls.	lb	...	.04¼
35% bleaching, 450 lb bbls.	lb	.04¾	.05¼
Solid 65% 100 lb bales	lb	.05	.05¼
Clarified bales	lb	...	.06
Quercitron, 51° 450 lb bbls.	lb	.06½	.07½
Powdered, 100 lb boxes	lb	.09	.13
Spruce, 25% liquid tanks wks.	lb	.01	.01¼
Powd. 50% 100 lb bags wks.	lb	.02	.02¼
Sumac, liquid 450 lb bbls.	lb	.07	.09

DYERS' SUNDRIES

Albumen, technical, egg 200 lb cs.	lb	1.10	1.13
Blood, domestic, 100 lb drs.	lb	.45	.55
Spray Yolk 150 lb cs.	lb	.45	.65
British Gum, 140 lb bags c/l 100 lb		...	4.24
Bags, lc/l	100 lb	...	4.34
Dextrin, corn 140 lb bags c/l. 100 lb		...	3.79
Bags, lc/l	100 lb	...	3.89
Yellow, bags c/l.	100 lb	...	3.84
Potato 140 lb bags c/l.	lb	...	.07
Bags, lc/l	lb	.07¾	.08¾
Tapioca, 200 lb bags, lc/l.	lb	...	.09½
Prussian blue	lb	.60	.62
Sago Flour, 150 lb bags	lb	.04½	.05
STARCH, powd. 140 lb bgs. c/100 lb		...	3.22
Bags lc/l	100 lb	...	3.32
Pearl, 140 lb bags c/l.	100 lb	...	3.12
Potato, domestic, 200 lb bags.	lb	.04½	.05
Imported, bags duty paid.	lb	.05	.05¼
Tapioca Flour, high grade bags.	lb	.06	.06¾
Medium grade, bags.	lb	.05	.05¼
Low grade, bags.	lb	.04¼	.04¾
Turkey Red Oil, bbls.	lb	.11	.12
Yolk Oil, bbls.	lb	.28	...

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Accroides Gum, yel.,	lb	.18	.20
ACONITE Leaves, bales	lb	.16	.17
Aconite Root, USP, bags	lb	.38	.40
Agar Agar, 1, 200 lb bales	lb	...	1.45
No. 2, bales	lb	...	1.35
No. 3, bales	lb	...	1.30
Agaric, white, cases	lb	...	...
Almonds, bitter bags bxs	lb	.32	.35
Sweet, bags	lb	.45	.46
Meal, tins, boxes	lb	.28	.30
Aletris Root, bags	lb	.49	.51
Alkanet Root, bags	lb	.08	.10
Aloes, Barbadoes, 120 lb bbls	lb	.65	.70
Cape, 400 lb cases	lb	.09	.10
Curacao, 100 lb cases	lb	.08	.08½
Socotrine, whole 100 lb cs	lb	.30	.32
Althea Root, cut cases	lb	.28	.40
Whole bags	lb	.09	.10
Ambergris, black boxes	oz	...	8.00
Grey, boxes	oz	...	28.00
Ammoniac, tears, bags	lb	1.35	1.40
Angelica Root, dom, bags	lb	.14	.15
Angostura Bark, bags	lb	.08	.10
Anise, Levant bags	lb	.17	.17½
Star, cases	lb	.12½	.13
Spanish, bags	lb	.26	.27½
Annatto Seed, bags	lb	.11½	.12
ARABIC GUM,			
White, No. 1, 200 lb bags	lb	.26	.28
Seconds, 250 lb bags	lb	.24	.26
Sorts, amber, 200 lb bags, bls. lb	lb	.14	.14½
Powd., USP, 300 lb bbls	lb	.22	.23
Areca Nuts, 150 lb bags	lb	...	.09
Powd., 200 lb bbls	lb	...	.12
Arnica Flowers, bales	lb	.08	.08¾
Root, bags	lb	.20	.22
Arrowroot, Amer. powd. bbls	lb	.06½	.09½
St. Vincent, powd. bbls	lb	.14	.15
Asafoetida, USP, 250 lb cases	lb	.25	.28
Powd. 50 lb bxs	lb	.50	.53
BALM GILEAD BUDS, bags	lb	.42	.44
Balmony Herb, bales	lb	...	.14
BALSAMS			
Copaiba, Para, 80 lb cs	lb	.23	.25
South American, 80 lb cs	lb	.28	.29
Fir Canada, cans	gal	13.00	14.00
Oregon, bbls., cans	gal	3.25	3.40
Peru, 120 lb cases	lb	1.75	1.80
Tolu, 90 lb cases	lb	1.25	1.35
Bamboo Brier Root, bags	lb	.06	.07
Barberry Bark, tree bales	lb	.22	.24
Bayberry Bark, bales	lb	.11	.14
Wax, bbls.	lb	.28	.30
Belladonna Leaves, bales	lb	.17	.18
Root, bags	lb	.11	.12
Bees Wax, white bbls	lb	.36	.37
Yellow, refined bbls	lb	.22	.23
Crude, bags	lb	.20	.21
Benzoin Gum, Siam, boxes	lb	1.15	1.20
Sumatra, 80 lb boxes	lb	.30	.32
Berberis Aquifolium Root, bags	lb	.15	.16
Beth Root, bags	lb	.22	.25
Blackhaw Bark, root, bales	lb	.40	.42
Tree, bales	lb	.24	.25
Blood Root, bags	lb	.13	.15
Blueflag Root, bags	lb	.23	.25
Boldo Leaves, bales	lb	.20	.21
Boneset Herb, bales	lb	.08	.10
Borage Flowers, bales	lb	.20	.22
Bryonia Root, bags	lb	.09	.10
BUCHU LEAVES, short, 250 lb			
bales	lb	.90	.95
leaf, bales	lb	1.00	1.05
Long, bales	lb	...	...
Buckthorn Bark, bales	lb	.07	.08
Burdock Root, bags	lb	.20	.22
Burgundy Pitch, dom. 110 lb stands			
Gross for net	lb	...	.05
Calabar Beans, bags	lb	.13	.14
Calamus Root, bleached cases	lb	.42	.47
Unbleached, bags	lb	.07	.08
Calendula Petals, imp. bales	lb	...	.30
Calisaya Bark, bales	lb	.22	.23
Camphor, see Chemicals			
Canary Seed, Morocco bags	lb	...	.06
South American, bags	lb	.05¼	.05½
Candelilla Wax, bags	lb	.24	.27
Canella Alba Bark, bales	lb	.51	.53
Cannabis, true imp. bags	lb	...	4.25
American (no assay) bales	lb	.80	.85
USP	lb	1.70	1.85
Cantharides, Chinese cases	lb	.98	1.03
Powd., boxes	lb	1.18	1.20
Cantharides, Russian, cases	lb	1.70	1.75
Powdered, boxes	lb	1.85	1.90
Caraway Seed, African, bags	lb	.22	.23
Dutch, 110 lb bags	lb	.21	.21½
Cardamom bleached cases	lb	1.20	1.70
Decorticated, cases	lb	1.05	1.15
Green, grinding, bags	lb	.92	.94
Carnauba Wax, Flor. bags	lb	.52	.53
No. 1 N Country bags	lb	.42	.45
No. 2 N Country bags	lb	.24	.26
No. 3 Fatty Gray, bags	lb	.19½	.20
No. 3 Chalky, bags	lb	.19½	.20
Cascara Amarga, 150 lb bales	lb	.30	.32
Cascara Sagrada, bales	lb	.15	.16
Cascarilla Bark, quilla bales	lb	.30	.35
Siftings, bbls.	lb	.20	.25
Cassia Buds, 66 lb cases	lb	.14	.15
China, select, mats cases	lb	.07	.07½
Saigon, assort. bales	lb	.24	.27
Cassia Fistula, baskets	lb	...	.12
Castor Beans, bags	lb	.03	.03½
Castoreum, 1 lb bot	lb	4.00	4.50
Catechu Gum, bags	lb	.09	.10
Catnip Herb, bales	lb	.12	.15
Celery Seed, 220 lb bags	lb	.21	.22
Ceresin Wax, white bags	lb	.08½	.09
Yellow, 200 lb bags	lb	.07½	.08
CHAMOMILE FLOWERS, Roman			
bales	lb	...	2.00
Hung. cases bales	lb	.13	.13½
Charcoal Willow, powd. bbls	lb	.06	.06½
Wood, powd. bbls	lb	.04	.05
Chestnut Bark, bags	lb	.07	.08
Herb, bales	lb	.06	.06½
Chicle Gum, bags	lb	.75	1.00
Chiretta, bales	lb	.10	.12
Cinchona Bark, red quills bales	lb	.55	.60
Broken, bales	lb	.24	.26
Cinnamon, Ceylon, bales, bond	lb	.20	.22
Civet, Abyssin horns	oz	2.75	3.75
Clover Tops, bags	lb	.15	.16
Cloves, Zanzibar, 135 lb bales	lb	.30½	.31
Amboynas, bales	lb	...	...
Penang, bales	lb	...	...

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Cochineal, USP, boxes	lb	.35	.37
Coca Leaves, Huanuco bags	lb	...	...
Truxillo, bags	lb	.40	.45
Cohosh Root, Black bags	lb	.09	.12
Blue, bags	lb	.18	.19
Colchicum Root, bags	lb	.08	.09
Seed, bags	lb	.10	.11
Colombo Root, whole bags	lb	.02	.04
Colocynth, apples, cases, bales	lb	.17	.22
Pulp, USP, bales	lb	.35	.38
Coltsfoot Leaves, bags	lb	.06	.07
Comfrey Root, bags	lb	.13	.14
Condurango Bark, bales	lb	.14	.15
Conium Seeds, bags	lb	...	.16
Copaiba Balsam Para, see Balsams			
Copal Gum	lb	.12	.15
Coriander Seed, Bombay bags	lb	.05	.07
Morocco, bags	lb	.10¼	.10¾
Bleached, bags	lb	.14¾	.15¼
Corn Silk, bales	lb	.05½	.06
Cotton Root Bark, bales	lb	.30	.35
Cramp Bark, so-called bales	lb	...	.08
True, bags	lb	.40	.44
Cranesbill Root, bags	lb	.10	.11
CUBEB BERRIES, XX bags	lb	.82½	.85
Powdered, boxes	lb	...	.85
Culvers Root, bags	lb	.30	.32
Cumin Seed, Levant bags	lb	...	...
Morocco, bags	lb	.25	.26
Cuttlefish Bone, Trieste, straps	lb	...	.16
Jewelers, large, straps	lb	...	.55
Small, straps	lb	...	.35
French, straps	lb	...	.17
Powdered, boxes	lb	...	.13
Broken, boxes	lb	.07	.07½
Damar Gum, 136 lb cases	lb	.32	.34
Damiana Leaves, bales	lb	...	.11
Dandelion Root, Imp., bags	lb	.15	.17
Deer Tongue Leaves, bales	lb	.09	.10
Digitalis Leaves, bales	lb	.07	.08
Dill Seed, bags	lb	.08½	.09
Dogwood Bark, Jamaica bags	lb	.11	.13
Flowers, bales	lb	...	.15
Doggrass Root, USP, cut bags	lb	.12	.15
Dragons Blood, mass cases	lb	.55	.60
Reeds, boxes	lb	1.40	1.45
ECHINACEA ROOT, bags	lb	.33	.34
Elecampane Root, bags	lb	.08½	.09
Elder Flowers, bales	lb	.18	.19
Elemi Gum, 89 lb cases	lb	.10	.11
Elm, select, 5 lb bundles cases	lb	.25	.26
Grinding, bags	lb	.10	.12
Powdered, bbls.	lb	.18	.19
ERGOT, 150-200 lb bags	lb	.52	.55
Eucalyptus Leaves, bales	lb	...	.05
Euphorbia Pilulifera Herb, bags	lb	...	.20
Euphorbium Gum, cases	lb	...	.32
Powdered, boxes	lb	...	.40
Fennel Seed, French, bags	lb	.15	.16
German, bags	lb	.19	.21
Indian, bags	lb	.12¼	.13¼
Flax Seed, whole 180 lb bbls	ea	13.00	13.50
Ground, 180 lb bbls	lb	.07½	.08
Foenugreek Seed, 200 lb bags	lb	.07	.07½
Fish Berries, 100-125 lb bags	lb	.03	.03½
Fringe Tree Bark, bags	lb	.18	.19
GALANGAL ROOT, bags	lb	.08	.09
Gambier Gum, bags	lb	.09¾	.10½
Galbanum Gum, cans	lb	1.20	1.35
Gamboge Gum, 160 lb cases	lb	1.02	1.05
Powdered, cases	lb	1.10	1.15
Gelsemium Root, bags	lb	.11	.11½
Gentian Root, bags	lb	.08¾	.09
Ginger, African, bags	lb	.13¼	.13½
Jamaica, grinding, bags bbls	lb	.32	.42
Japan, bags	lb	.14	.14¼
Cochin, ABC & lemon, bags	lb	.15	.15½
Ginseng Root, cultivated, bags	lb	8.00	10.00
Northwestern Wild, bags	lb	14.00	15.00
Southern Wild, bags	lb	10.00	12.00
Golden Seal Root, bags	lb	3.50	3.55
Powdered, boxes	lb	3.75	3.85
Grains of Paradise, bags	lb	.12	.14
Grindelia Robusta Herb, bales	lb	.09	.10
Guaiac Gum, 80 lb cases	lb	.35	.37
Guarana, tins, cases	lb	.60	.75
GUM, see Arabic Gum, etc.			
HELLEBORE ROOT,			
Black, bbls.	lb	.08	.10
Powdered	lb	.13	.15
White, Powd. 250 lb bbls	lb	.16	.17
Helonias Root, (unicorn false) bags	lb	.75	.80
Hemp Seed, Manchurian bags	lb	.03¾	.04
Chilian, bags	lb	...	...
Henbane Leaves, bales, USP	lb	.35	.40
No assay	lb	.30	.35
Henna Leaves, bales	lb	.15	.17
Powdered	lb	.17	.18
Honey, Calif., 120 lb cases	lb	.11½	.12
Hops, N. Y. prime bales	lb	.18	.20
Pacific Coast prime bales	lb	.16	.18
Horehound Herb, bales	lb	...	.11
Horsetail Rush, bags	lb	...	.16
India Gum, see Karaya			
INSECT FLOWERS, open whole bales	lb	...	...
Closed whole, bales	lb	...	...
Powdered, pure 200 lb bbls	lb	.60	.64
Flowers and stems, 50 p. c. 200 lb bbls.	lb	.38	.40
Ipecac Root, Cartagena, bags	lb	1.75	1.80
Powdered, 200 lb bbls. boxes	lb	1.90	2.00
Rio Whole, bags	lb	1.75	1.85
Powdered, 200 lb bbls. boxes	lb	1.95	2.00
Isinglass, American, 130 lb cs	lb	.65	.70
Russian (Beluga) bxs ctns	lb	5.00	7.50
JABORANDI LEAVES, bales	lb	.17	.19
Jalap Root, whole, 150 lb bags	lb	.31	.35
Powdered, USP, 250 lb bbls	lb	.40	.42
Japan Wax, 224 lb cases	lb	.15¾	.16
Job's Tears, white bags	lb	.08	.09
Juniper Berries, 125 lb bags	lb	.03	.03½
KAMALA, boxes	lb	1.90	2.00
Karaya Gum, powdered, bbls	lb	.15	.20
Kava Kava Root, bags	lb	.17	.18
Kino Gum, black cases	lb	.50	.55
Kola Nuts, 150 lb bags	lb	.04½	.05
Kousso Flowers, bags	lb	...	4 00

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LADY SLIPPER ROOT, bags	lb	.50	.52
Larkspur Seed, bags	lb	.31	.35
Laurel Leaves, bales	lb	.04½	.05
Lavender Flowers, Ordinary	lb	.20	.25
Selected	lb	.30	.34
Leeches, tubs	Per 100	...	9.75
Lemon Peel, bags	lb	.09	.10
Licorice Root, Russian whole	lb	.07¼	.08
Spanish, natural bales	lb	.09	.09½
Powdered, bbls.	lb	.10	.11
Selected, 2 & 5 lb bundles	lb	.17	.20
Cuttings, 125 lb bags	lb	.07½	.08
Life Everlasting Herbs, bales	lb	.05	.06
Lime Juice, clarified bbls	gal	.50	.60
Linden Flowers, with leaves, bales	lb	.17	.18
Without Leaves, bales	lb	.35	.36
Liverwort Leaves, bales	lb	.20	.22
Lobelia Herb, bales	lb	.19	.25
Lobelia Seed, bags	lb	.55	.60
Lovage Root, Imported, bags	lb	...	.25
Lupulin, boxes	lb	1.40	1.50
Domestic	lb	1.30	1.40
Lycopodium, 88 lb cs	lb	.43	.45
MACE, Siauw, No. 1 cases	lb	.44	.45
Banda, No. 1 cases	lb	.50	.52
Batavia, cases	lb	.38	.39
Malva Flowers, blue bales	lb	.27	.30
Black, bales	lb	.65	.75
Manna, large flake cases	lb	.56	.58
Small flake, cases	lb	.28	.30
Sortz, cases	lb	.27	.30
Mandrake Root, bags	lb	.17	.18
Mastic Gum, 120 lb cases	lb	.65	.70
Mezereon Bark, bags	lb	.11	.12
Matico Leaves, bales	lb	.20	.22
Marjoram Leaves, German bales	lb	.17½	.18
French, bales	lb	.13½	.14½
Millet Seed, dom. yellow bags	lb	.03¾	.05
Montan, Wax, crude bags	lb	.04	.04½
Bleached	lb	...	...
Moss, Iceland bales	lb	.08	.09
Irish, bleached bales	lb	.09	.10
Mullein Flowers, tins	lb	...	2.00
Musk, pods Cabardine, tins	oz	16.00	17.00
Tonquin	oz	22.00	25.00
Grain Cab.	oz	25.00	26.00
Tonquin	oz	35.00	38.00
Synthetic, see Chemicals			
Musk Root, Russian bags	lb	...	...
Mustard Seed, Bari brown bags	lb	.08½	.09
Bombay, brown	lb	.08½	.09
California, brown	lb	.08½	.09
Yellow	lb	...	.09
Chinese, yellow	lb	.04	.04½
English, yellow	lb	.08½	.09
Dutch, yellow	lb	.08	.08½
Danish, yellow	lb	.08½	.09
Myrrh Gum, select 200 lb cs	lb	.38	.40
Sorts, cases	lb	.36	.38
NUTGALLS, Chinese bags	lb	...	...
Aleppy, bags	lb	.14	.15
Nutmegs, 110s cases	lb	.24	.25
75s, 80s cases	lb	.26	.27
Nux Vomica Buttons, bags	lb	.06	.06½
Powdered, 200 lb bbls	lb	.10	.10½
OAK BARK, red bags	lb	.05	.06
White, bags	lb	.06	.07
Olibanum Gum, sift 280 lb cases	lb	.10	.11
Tears, 280 lb cases	lb	.13	.14
No. 1, all white, 280 lb cases	lb	.21	.22
Opium, gum USP cases	lb	...	8.00
Granular, cans	lb	...	9.00
Powdered, USP cans	lb	...	9.00
Orange Flowers, cases	lb	...	1.00
Orange Peel, bitter bags	lb	.07½	.07¾
Sweet, bags	lb	.07½	.08
Orris Root Florentine bold bags	lb	.07	.08
Verona, bags	lb	.05	.06
Powdered, 200 lb bbls	lb	.08	.09
Fingers, cases	lb	.65	.70
Ozokerite Wax brown hard bags	lb	.22	.24
Green, hard bags	lb	.25	.26
Refined, yellow bags	lb	...	...
PAPRIKA, bags	lb	.17	.22
Hungarian	lb	.27	.37
Pareira Brava Root, bags	lb	.19	.20
Parsley Seed, bags	lb	.08	.08½
Patchouli Leaves, bales	lb	.22	.25
Pepper, black Sing, bags	lb	.10	.10½
White, bags	lb	.13½	.14
Peppers, red Mombasa bags	lb	.24	.26
Cherries, bags	lb	.16½	.17
Bombay, bags	lb	.15	.15½
Japan, bags	lb	.28	.30
Pennyroyal Herb, bales	lb	.08	.12
Peppermint Leaves, imp. bales	lb	...	.35
Domestic leaf	lb	.27	.29
Peru Balsam, see Balsams			
Pichi Leaves, bags	lb	.23	.35
Pimento, select bags	lb	.04½	.04⅝
Pink Root, true bags	lb	...	1.20
Pitch, Burgundy, see Burgundy Pitch			
Pleurisy Root, bags	lb	...	.22
Plantain Leaves, bales	lb	...	.15
Poke Berries, bags	lb	...	.15
Poke Root, bags	lb	...	.07½
Pomegranate Bark, of root bags	lb	...	.30
Of Fruit, bags	lb	...	.30
Of tree	lb	...	.30
Poppy Flowers, red bags	lb	.25	.27
Poppy Seed, Dutch, bags	lb	.10	.10½
German, bags	lb	...	.10½
Turkish, bags	lb	.06	.08
Blue Indian, bags	lb	.08	.08¼
White Indian, bags	lb	.07	.07½
Prickly Ash Bark Southern, bags	lb	.14	.14½
Northern, bags	lb	...	.16
Prickly Ash Berries, bags	lb	.11	.13
Prince's Pine, bales	lb	.14	.15
Pulsatilla Herb, bags	lb	.25	.27
Pumpkin Seed, bags	lb	.14	.16
QUASSIA CHIPS, bags	lb	...	.07
Queen of the Meadow Herb, bags	lb	...	.06
Quince Seed, bags	lb	.95	1.20
RAPE SEED, South Amer. bags	lb	.06½	.07
Dutch, bags	lb	.08	.08¼
Japanese, small, bags	lb	.05½	.06
Raspberries, dried boxes	lb	.35	.40
Red Saunders	lb	.17	.19
Rhatany Root, bags	lb	...	.10
RHUBARB, H. D. cases	lb	.43	.45
Powdered, 200 lb bbls	lb	.48	.50
Rosemary Leaves, bales	lb	.04½	.05

Saccharin

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Crude Drugs

Rosemary Flowers, cases bales	lb	.28	.30
Rose Petals, pale	lb	.22	.25
Red	lb	...	.60
Rue Herb, bales	lb	.30	.35
SABADILLA SEED, bags	lb	.12	.12½
Powder, bbls	lb	.16	.17
Saffron Flowers, Amer. bales	lb	1.08	1.15
Valencia, 1 lb cans	lb	38.00	39.00
Sage, Dalmatian bales	lb	.05	.06½
Greek, bales	lb	.04¼	.04¾
Spanish, bales	lb	.03	.03½
Sandalwood, chips bags	lb	...	.30
Ground, bags	lb	...	.35
Sandarac Gum, 300 lb bbls	lb	.23	.25
Sarsaparilla, Honduras, bales	lb	.61	.65
Mexican, bales	lb	.32	.33
Sassafras Bark, ordinary bales	lb	.12	.14
Select, bales	lb	.25	.28
Savory Leaves, bales	lb	.09½	.10
Saw Palmetto Berries, bags	lb	.09	.10
Scammony Resin, boxes	lb	1.15	1.25
Scammony Root, bags	lb	.06½	.07
Senega Root, bags	lb	.64	.65
SENNA, Alex. 150 lb cases	lb	.30	.31
Half Leaf, 350 lb bales	lb	.17½	.20
Siftings, 400 lb bales	lb	.10	.11
Powdered, 200 lb bbls	lb	.12	.13
Tinnevelly, job, 350 lb bales	lb	.11	.13
Grinding, 350 lb bales	lb	.05	.08
Powdered, 200 lb bbls	lb	.08	.08½
Pods, 350 lb bales	lb	.06	.06½
Serpentaria Root, bags	lb	.80	.85
Shellac, T.N., bags	lb	.51	.52
Superfine Orange, bags	lb	.57	.58
D. C., bags	lb	...	.80
V. S. O., cases	lb	...	.80
Pwd. reg., 350 lb bbls	lb	...	.66
Regular Bleached, 350 lb bbls	lb	...	.70
Bone, Dry, 350 lb bbls	lb	...	.63
Simaruba Bark, bales	lb	.09	.10
Sideritis Herb, cut bags	lb	...	.18
Skullcap Leaves, bales	lb	...	.38
Sloe Berries, bags	lb	.03	.04
Snake Root, Canada natural bags	lb	.34	.36
Stdipped, bags	lb	...	.55
SOAP BARK, whole, 150-200 lb bales	lb	.07½	.08
Cut, 125-175 lb bags	lb	.09	.09½
Crushed, 200 lb bbls	lb	.09½	.10
Powdered, 200 lb bbls	lb	.12	.14
Spearmint Leaves, American bales	lb	.23	.24
Spermaceti, blocks cakes cases	lb	.36	.37
Spikenard Root, bags	lb	.15	.16
Spruce Gum, boxes	lb	1.00	1.50
Squaw Vine, bales	lb	...	.17
Stavesacre Seed, bags	lb	.28	.29
Stone Root, bags	lb	.09	.10
Storax, liquid artif	lb	.70	.75
Gen. USP	lb	.90	1.00
St. Ignatius Beans, bags	lb	.22	.23
St. John's Bread, bags	lb	.04	.06
Stramonium Leaves, bales	lb	.07	.07½
Stramonium Seed, bags	lb	.12	.13
Strophanthus Seed, Hispidus	lb	...	...
Kombe, bags	lb	.30	.35
Sunflower Seed, domestic bags	lb	.07	.07½
South American, bags	lb	.06	.07¼
TAGALDER BARK, bags	lb	...	.05
Tamarinds, bbls	lb	...	.06½
Kegs	per keg	...	3.50
Tansy Herb, bales	lb	.17	.18
Tar, Barbadoes, 50 gal. bbls	gal	1.60	1.75
Thus Gum, 280 lb bbls	lb	...	.05½
Thyme, Spanish bales	lb	...	.11
French, bales	lb	...	.08
Tillia .See Linden			
Tolu Balsam, see Balsams			
Tonga Bark, bags	lb	.30	.31
Tonka Beans, Angostura, cases	lb	2.00	2.10
Para, cases	lb	.80	.85
Surinam, cases	lb	.85	.95
Tragacanth Gum, No. 1, ribbon, 200 lb cs.	lb	1.50	1.55
No. 2 to No. 6, cases	lb	1.00	1.50
Powdered, 50 lb boxes	lb	1.00	1.50
Turkish, cases	lb	.75	.90
Turmeric Root, Madras bags	lb	.10½	.11
Aleppy, bags	lb	.08⅝	.09
China, bags	lb	.07	.07½
Turpentine, Venice, true 80 lb cs	lb	.20	.22
Artificial, 80 lb cases	lb	.14	.15
Spirits, see Naval Stores			
UNICORN ROOT, false, see Helonias			
True, see Aletris			
Uva Ursi Leaves, bales	lb	.05½	.06½
VALERIAN ROOT, Belgian bags	lb	.10½	.11
Vanilla Beans Mex. whole cases	lb	8.50	11.00
Cuts, cases	lb	6.00	6.50
Bourbon, cases	lb	4.50	4.75
South American, cases	lb	6.00	6.50
Tahiti, yellow label cases	lb	...	...
Green Label, cases	lb	...	...
Violet Flowers, bags	lb	.65	.70
WAHOO BARK, of root bags	lb	.90	.95
Of Tree, bags	lb	.43	.45
White Pine Bark, rossed, bags	lb	.06½	.07½
White Poplar Bark, bags	lb	.04	.05
Wild Cherry Bark, thin green Rossed, bales	lb	.10	.12
Thick Rossed, bales	lb	.08	.09
Thin Natural, bales	lb	.08	.09
Thick Natural, bales	lb	.07	.08
Willow, bark bags	lb	...	.08
White, bags	lb	...	.15
Witch Hazel Bark, bags	lb	...	.06
Witch Hazel Leaves, bales	lb	...	.07½
Worm Seed, American bags	lb	.09	.10
Levant bags	lb	3.50	3.75
Wormwood Herb, imported bales	lb	...	.10
Yacca Gum, red	lb	.04	.04½
Ground	lb	.05½	.06½
YELLOW DOCK ROOT, bags	lb	.13	.15
Yellow Parilla Root, bags	lb	.16	.17
Yerba Santa, bags	lb	.11	.12
Zedoary Root, bags	lb	.08	.10

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Essential Oils

Almond Bitter USP 5 lb bots	lb	3.50	3.75
Bitter ff PA 5 lb bots	lb	3.50	3.75
Artificial (See Benzaldehyde—Chemicals)			
Sweet, 56 lb cans	lb	.34	.36
Peach Kernel, 55 lb tins	lb	.25	.27
Apricot, see Peach Kernel			
Amber, crude 25 lb tins	lb	.70	.80
Rectified, 25 lb tins	lb	.90	1.00
Angelica Root, 1 lb bot	lb	38.00	39.00
Seed, 1 lb bot	lb	36.00	38.00
ANISE, Tech., 66 lb case	lb	.45	.50
USP 50 lb tins	lb	.52½	.55
Bay, 25 lb tins	lb	2.50	2.60
Bergamot, 25 lb coppers	lb	2.60	2.70
Artificial, 25 lb cans	lb	2.00	2.25
Birch Tar, rect. 5 lb bot	lb	1.10	1.15
Crude, 50 lb tins	lb	.60	.65
Bois de Rose, 25 lb tins	lb	2.50	2.65
Cade, USP, 25 lb tins	lb	.35	.40
USP, 5 lb bot	lb	.45	.50
Cajuput, native, 50 lb tins	lb	.80	.85
Calamus, 5 lb bot	lb	4.25	4.75
Camphor, heavy, 1000 lb drums	lb	.11½	.12
Japanese, white, 72 lb cases	lb	.13½	.15
White, 1000 lb drums	lb	.13	.15
Cananga, Native 25 lb tins	lb	2.25	2.50
Rectified, 25 lb tins	lb	2.50	2.75
Caraway, USP	lb	7.00	7.50
Cardamom, USP, 1 lb bot	lb	20.00	22.00
Carrol, 5 lb bot	lb	12.00	13.00
CASSIA, 75-80 p.c. 66 lb cases	lb	...	...
Redistilled, USP, 50 lb cans	lb	3.00	3.10
Cedar Leaf, 50 lb tins	lb	1.10	1.20
Cedar Wood, light 1000 lb drums	lb	.26	.28
Celery, 1 lb bot	lb	8.50	9.00
Cinnamon, Ceylon 1 lb bot	lb	11.00	12.50
Leaf, 5 lb bot	lb	...	2.00
CITRONELLA, Ceylon, 1000 lb drs.	lb	.70	.71
50 lb tins	lb	.72	.74
Java, 400 lb drums	lb	...	.85
50 lb tins	lb	..	.87½
Cloves, USP, 50 lb cans	lb	2.10	2.35
6 lb bot.	lb	2.15	2.45
Copaiba, USP, 50 lb tins	lb	.35	.40
Coriander, USP, 1 lb bot	lb	18.00	19.00
Croton, USP 25 lb tins	lb	1.00	1.10
Cubebs, USP, 5 lb bot	lb	6.00	6.25
Cumin, 1 lb bot	lb	15.00	20.00
Dill, 1 lb bot	lb	4.25	5.00
Erigeron, 20 lb tins	lb	.90	1.00
EUCALYPTUS, Austl. USP			
56 lb cs.	lb	.47½	.50
500 lb drums	lb	...	.45½
Fennel USP, 25 lb tins	lb	1.10	1.20
Geranium, Algerian, 25 lb tins	lb	8.00	8.50
Bourbon, 25 lb tins	lb	6.75	7.00
Turkish, 28 lb tins	lb	4.75	5.00
Ginger, 1 lb bot	lb	5.75	6.00
Gingergrass, 28 lb tins	lb	2.75	3.00
Hemlock, 50 lb cans	lb	1.25	1.30
Juniper Berries, USP, 25 lb tins	lb	1.25	1.35
Wood, 50 lb tins	lb	.60	.70
Lavender, USP, 28 lb tins	lb	2.75	3.50
Spike, Spanish 50 lb cans	lb	.70	.80
LEMON, Ital. USP, 25 lb tins	lb	.80	.90
American, USP, 25 lb tins	lb	.75	.80
Lemongrass, native, 50 lb cans	lb	80	.85
Limes, express 25 lb tins	lb	1.70	1.80
Distilled, 25 lb tins	lb	.80	.90
Linaloe, Mex. 80 lb cases	lb	2.15	2.35
Mace, distilled, 50 lb tins	lb	...	.90
Mirbane, ref., see Ar. Chemicals			
Mustard, USP, 1 lb bot	lb	...	17.00
Artif., USP, 5 lb bot	lb	2.25	2.50
Neroli, Bigarade, ¼ and 1 lb bot.	lb	75.00	100.00
Petale, 1 lb bot	lb	90.00	115.00
Artificial, 1 lb bot	lb	10.00	25.00
Nutmeg, USP, 25 lb tins	lb	...	.90
Orange, bitter, 25 lb tins	lb	2.75	3.00
Sweet, W. Ind. 25 lb tins	lb	2.75	3.00
Italian, 25 lb cop	lb	4.00	4.50
American, 25 lb tins	lb	3.30	3.40
Origanum, 50 lb cans	lb	.30	.35
Parsley, 1 lb bot	lb	3.50	4.00
Patchouli, 5 lb bot	lb	8.00	8.50
Pennyroyal, dom 25 lb tins	lb	1.95	2.25
Imported, 25 lb tins	lb	1.75	1.90
PEPPERMINT, nat. 60 lb cases	lb	2.65	2.80
Redist., USP, 60 lb cases	lb	2.90	3.05
Petit Grain, S. Am. 25 lb tins	lb	1.75	1.85
French, 1 lb bot	lb	6.50	7.00
Pimento, 25 lb tins	lb	1.85	1.95
Pinus Sylvestris, 25 lb tins	lb	...	1.75
Pumilio, USP 25 lb tins	lb	...	2.75
Rose, Fr., 8, 16 & 32 oz pkge.	oz	...	9.00
Bulg., 8, 16 & 32 oz pkgs.	oz	5.50	6.00
Artificial, 1 lb bot	oz	2.00	3.00
Rosemary, USP, 27½ lb tins	lb	.45	.48
1000 lb drums	lb	...	.42¼
Tech., 27½ lb tins	lb	.40	.45
Rue, 1 lb bot	lb	...	4.25
Sandalwood, E. Ind. USP, 76 lb cases	lb	7.70	7.85
W. Indian, (Amyris) 25 lb tins	lb	3.50	3.75
Sassafras, USP, 50 lb cans	lb	1.00	1.10
Artificial, 60 lb cans, 1000 lb drs.	lb	...	.45
Savin, 5 lb tins	lb	3.25	3.50
Spearmint, USP, 60 lb cases	lb	2.50	2.60
Spruce, 50 lb tins	lb	1.25	1.30
Tansy Amer., 20 lb tins	lb	7.00	7.25
Tar, 50 gal. bbls	gal	.24	.25
Refined, USP 25 lb tins	lb	...	...
Thyme, red, USP 25 lb tins	lb	1.00	1.10
White, USP 25 lb tins	lb	1.10	1.15
Crude, 110 lb drums	lb	.85	.90
Vetivert, Bourbon, 1 lb bot	lb	5.50	6.00
Java, 1 lb bot	lb	22.00	24.00
Wine, heavy 1 lb bot	lb	...	2.75
WINTERGREEN,			
Sweet bch, 25 lb tins	lb	2.00	3.00
Gaultheria, true 25 lb tins	lb	4.00	7.00
Synthetic, USP, 50 lb cases	lb	.57	.62
Wormseed Balt., USP, 25 lb tins	lb	7.25	7.50
Wormwood, dom., 25 lb tins	lb	6.50	6.75
Ylang Ylang, Bourbon 10 lb. tins			
No. 1	lb	7.00	9.00
No. 2	lb	5.00	6.00
Manila, 1 lb bot	lb	30.00	40.00
Artificial, 1 lb bot	lb	10.00	12.00

OLEORESINS

Aspidium, USP 1 lb bot	lb	2.75	3.00
Capsicum, USP, 5 lb bot	lb	2.50	2.75
Cubeb, USP, 1 lb bot	lb	4.75	5.00
Ginger, 5 lb bot	lb	3.00	3.10
Malefern, See Aspidium			
Orris, 1 lb bot	lb	...	18.00
Pepper, black, USP, 1 lb bot	lb	3.50	4.00
Vanilla, 1 lb bot	lb	9.50	10.00

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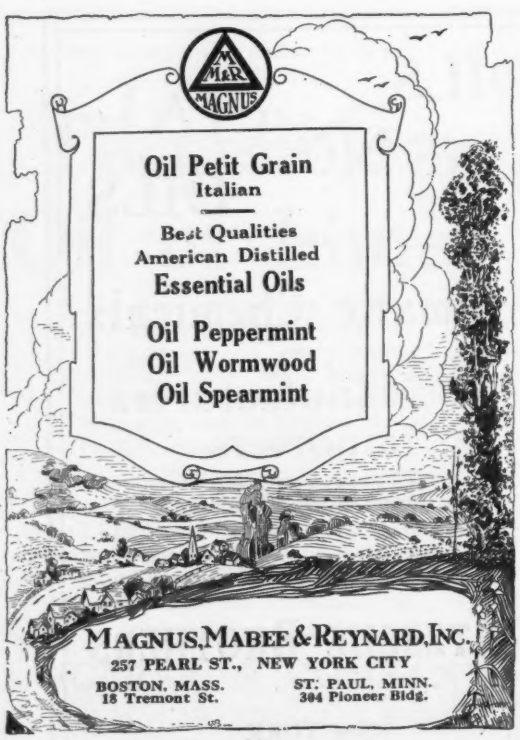
NATURAL DERIVATIVES			
Anethol, 2 lb bot.	lb	1.60	2.00
Borneol, 1 lb bot.	lb	...	3.50
Citronellal, 1 lb bot.	lb	2.00	2.25
CITRAL, 25 lb cans	lb	2.75	3.00
EUCALYPTOL, USP, 25 lb cans	lb	.75	.80
Eugenol, USP, 25 lb cans	lb	2.85	3.25
Geraniol, Domestic, 50 lb cans	lb	3.00	3.50
Imported, 5 lb bot.	lb	4.50	5.00
Iso-Eugenol, 1 lb bot.	lb	4.50	5.00
Imported	lb	6.50	7.00
Linalool, 5 lb bot.	lb	7.00	7.25
MENTHOL, 60 lb cases	lb	...	10.00
Less cases, 5 lb cans	lb	10.25	10.50
Rhodinol, 1 lb bot.	lb	15.00	20.00
SAFROL, 60 lb cans	lb	.55	.57
Thymol, USP, 10 lb cans	lb	3.25	3.50
SYNTHETIC AROMATICS			
Acetaldehyde, 50% sol pure, 5 lb bot.	lb	1.75	2.00
Acetophenone CP, 1 lb bot.	lb	4.00	4.25
Amyl Acetate, pure, 5 gal cans	gal	7.00	8.00
Amyl Butyrate, 1 lb bot.	lb	2.00	2.10
Amyl Formate, 1 lb bot.	lb	3.00	3.25
AMYL SALICYLATE, 100 lb cbys.	lb	1.45	1.60
Anisic Aldehyde, 1 lb bot.	lb	3.75	4.50
BENZALDEHYDE, USP, 40 lb cbys	lb	1.50	1.60
FFC, 40 lb cbys.	lb	1.75	1.85
Benzoic Ether, See Ethyl Benzoate			
Benzyl Acetate, 100 lb cbys.	lb	1.25	1.40
Benzyl Alcohol, 5 lb bot.	lb	1.50	1.75
BENZYL BENZOATE, 5 lb bot.	lb	1.60	1.75
Medicinal FFC	lb	1.75	2.00
Benzyl Formate, 1 lb bot.	lb	2.50	3.00
Bromstyrol, 25 lb kegs	lb	4.00	4.25
Butyric Ether, See Ethyl Butyrate			
Cinnamic Acid, 5 lb cans	lb	3.00	3.25
Cinnamic Alcohol, liquid 1 lb bot.	lb	10.00	12.00
Crystallizable	lb	12.00	15.00
Cinnamic Aldehyde, 1 lb bot.	lb	3.20	3.50
CITRONELLOL, 1 lb bot.	lb	8.00	14.00
COUMARIN, 25 lb cans	lb	4.50	4.75
DIETHYL PHTHALATE, 25 lb cans	lb	.55	.60
Diphenyloxide, 25 lb tins	lb	.85	.90
Ethyl Acetate, pure, 5 lb bot.	lb	.45	.50
Ethyl Benzoate, 5 lb bot.	lb	1.85	2.00
Ethyl Butyrate, 5 lb bot.	lb	2.00	2.25
Ethyl Cinnamate, 1 lb bot.	lb	3.75	4.00
Ethyl Formate, 5 lb bot.	lb	2.00	2.10
Ethyl Valerate, 5 lb bot.	lb	4.50	4.75
Formic Ether, See Ethyl Formate			
Geranyl Acetate, 1 lb bot.	lb	4.25	4.75
Heliotropin, dom., 10 lb bot.	lb	2.00	2.25
Imported	lb	2.50	2.75
Indol, CP, 1oz. bot.	oz	8.50	9.00
Ionone, 1 lb bot.	lb	5.00	9.00
Alpha	lb	10.00	12.00
Beta	lb	9.00	11.00
Methyl	lb	12.50	15.00
Linalyl Acetate, 1 lb bot.	lb	7.00	10.00
Linalyl Benzoate, 1 lb bot.	lb	13.00	14.00
METHYL ANTHRANILATE dom., 1 lb bot.	lb	3.50	4.00
Imported	lb	4.50	5.00
Methyl Cinnamate, 1 lb bot.	lb	3.75	4.00
Methyl Paracresol, 1 lb bot.	lb	8.00	9.00
METHYL SALICYLATE, USP 500 lb drums	lb	.55	.60
50 lb cases	lb	.57	.62
Second Hands	lb	.50	.52
Mirbane, rect. 1000 lb drums	lb	.12½	.14
Musk Ambrette, 1 lb cans	lb	14.50	16.50
Musk Ketone, 1 lb cans	lb	13.00	14.00
Musk Xylene, 5 lb cans	lb	2.90	3.15
Nerolin, 1 lb cans	lb	1.75	2.00
Oenanthic Ether, 5 lb bot.	lb	1.25	1.50
Phenylacetaldehyde, Dom., 1 lb bot.	lb	9.00	11.00
Imported	lb	12.00	14.00
Phenylacetic Acid, 1 lb bot.	lb	3.00	3.25
PHENYLETHYLALCOHOL dom., 1 lb bot.	lb	8.00	9.00
Imported	lb	8.50	10.00
Phenylpropylalcohol, 1 lb bot.	lb	15.00	16.00
TERPINEOL, CP, 1000 lb drums	lb	.50	.55
Cans 50 lb	lb	.55	.57
Imported, 25 lb cans	lb	.95	1.20
Terpinyl Acetate, 25 lb cans	lb	1.65	1.85
VANILLIN, USP, 400 oz. cans	oz	.41	.41⅛
Cans, 16 oz., 80 oz.	oz	.41½	.42⅛
Valerianic Ether, See Ethyl Valerate			
Yara Yara, 1 lb cans	lb	1.75	2.00
PERFUMERS' SUNDRIES			
Almond Meal, 25 lb cans	lb	.28	.30
Ambergris, black, bxs.	oz	...	8.00
Ambergris, gray, bxs.	oz	...	28.00
Balsam Copaiba, Para, 80 lb cases	lb	.23	.24
South American, 80 lb cases	lb	.28	.29
Balsam Peru, 60 lb cans	lb	1.75	1.80
Balsam Tolu, 90 lb cases	lb	1.25	1.35
Benzoin Gum, Siam, bxs.	lb	1.15	1.20
Castoreum, 1 lb bot.	lb	4.00	4.50
Chalk, precip. light, 175 lb bbls.	lb	.04½	.05
Cherry Laurel Water, 5 gal cans.	gal	1.15	1.25
Civet Abyssin, horns	oz	2.75	3.75
Labdanum, 5 lb bot.	lb	...	8.00
Lanolin hydrous, 350 lb bbls.	lb	.21	.22
Anhydrous, 350 lb bbls.	lb	.23	.24
Musk pods, Cabardine, tins	oz	16.00	17.00
Tonquin, tins	oz	22.00	25.00
Grains, Cabardine, tins	oz	25.00	26.00
Tonquin, tins	oz	35.00	38.00
Synthetic, See Aromatic Chemicals			
Orris Rt. Flor., powd. bbls.	lb	.09	.11
Verona, bbls.	lb	.08	.09
Petrolatum, snow white, 350 lb bbls	lb	...	.12½
Light Amber, 350 lb bbls.	lb	.04	.04½
Rice Starch, 140 lb bgs.	lb	.09	.10
Rose Water, 5 gal cbys.	gal	.90	1.10
Sandalwood chips, powd., bags	lb	.30	.35
Saponin, 5 lb tins	lb	1.25	1.50
Talc Italian, 220 lb bgs.	ton	42.00	55.00
Talc French, 220 lb bags	ton	32.00	45.00
Talc, domestic ref., 100 lb bags	ton	20.00	30.00



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SITUATIONS WANTED

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SALESMAN—Experienced selling industrial chemicals to paint, varnish, rubber, leather, and kindred industries by established New York Importing house. State fully experience and references. Box 396, DRUG & CHEMICAL MARKETS.

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HELP WANTED

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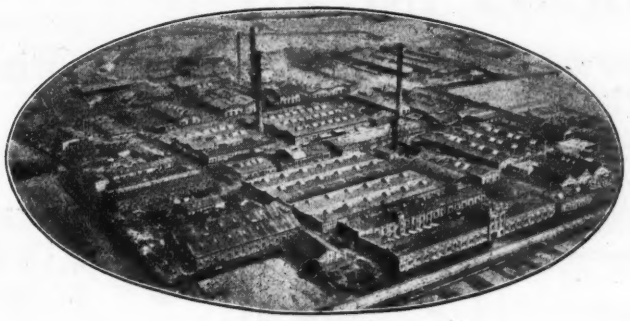

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VOLUME XIII, NEW YORK, JULY 18, 1923 No. 3

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